

- (<http://www-genome.wi.mit.edu/cgi-bin/contig/rhmapper.pl>) to determine the probable chromosomal location. Using this approach, P501S was mapped to the long arm of chromosome 1 at WI-9641 between q32 and q42. This region of chromosome 1 has been linked to prostate cancer susceptibility in hereditary prostate cancer (Smith *et al.* 5 *Science* 274:1371-1374, 1996 and Berthon *et al. Am. J. Hum. Genet.* 62:1416-1424, 1998). These results suggest that P501S may play a role in prostate cancer malignancy.

EXAMPLE 20

REGULATION OF EXPRESSION OF THE PROSTATE-SPECIFIC ANTIGEN P501S

10

Steroid (androgen) hormone modulation is a common treatment modality in prostate cancer. The expression of a number of prostate tissue-specific antigens have previously been demonstrated to respond to androgen. The responsiveness of the prostate-specific antigen P501S to androgen treatment was examined in a tissue culture 15 system as follows.

Cells from the prostate tumor cell line LNCaP were plated at 1.5×10^6 cells/T75 flask (for RNA isolation) or 3×10^5 cells/well of a 6-well plate (for FACS analysis) and grown overnight in RPMI 1640 media containing 10% charcoal-stripped fetal calf serum (BRL Life Technologies, Gaithersburg, MD). Cell culture was 20 continued for an additional 72 hours in RPMI 1640 media containing 10% charcoal-stripped fetal calf serum, with 1 nM of the synthetic androgen Methyltrienolone (R1881; New England Nuclear) added at various time points. Cells were then harvested for RNA isolation and FACS analysis at 0, 1, 2, 4, 8, 16, 24, 28 and 72-hours post androgen addition. FACS analysis was performed using the anti-P501S antibody 10E3- 25 G4-D3 and permeabilized cells.

For Northern analysis, 5-10 micrograms of total RNA was run on a formaldehyde denaturing gel, transferred to Hybond-N nylon membrane (Amersham Pharmacia Biotech, Piscataway, NJ), cross-linked and stained with methylene blue. The filter was then prehybridized with Church's Buffer (250 mM Na_2HPO_4 , 70 mM H_3PO_4 , 30 1 mM EDTA, 1% SDS, 1% BSA in pH 7.2) at 65 °C for 1 hour. P501S DNA was

labeled with ^{32}P using High Prime random-primed DNA labeling kit (Boehringer Mannheim). Unincorporated label was removed using MicroSpin S300-HR columns (Amersham Pharmacia Biotech). The RNA filter was then hybridized with fresh Church's Buffer containing labeled cDNA overnight, washed with 1X SCP (0.1 M NaCl, 0.03 M $\text{Na}_2\text{HPO}_4 \cdot 7\text{H}_2\text{O}$, 0.001 M Na_2EDTA), 1% sarkosyl (n-lauroylsarcosine) and exposed to X-ray film.

Using both FACS and Northern analysis, P501S message and protein levels were found to increase in response to androgen treatment.

10

EXAMPLE 20

PREPARATION OF FUSION PROTEINS OF PROSTATE-SPECIFIC ANTIGENS

The example describes the preparation of a fusion protein of the prostate-specific antigen P703P and a truncated form of the known prostate antigen PSA. The truncated form of PSA has a 21 amino acid deletion around the active serine site. The expression construct for the fusion protein also has a restriction site at 3' end, immediately prior to the termination codon, to aid in adding cDNA for additional antigens.

The full-length cDNA for PSA was obtained by RT-PCR from a pool of RNA from human prostate tumor tissues using the primers of SEQ ID NO: 607 and 608, and cloned in the vector pCR-Blunt II-TOPO. The resulting cDNA was employed as a template to make two different fragments of PSA by PCR with two sets of primers (SEQ ID NO: 609 and 610; and SEQ ID NO: 611 and 612). The PCR products having the expected size were used as templates to make truncated forms of PSA by PCR with the primers of SEQ ID NO: 611 and 613, which generated PSA (delta 208-218 in amino acids). The cDNA for the mature form of P703P with a 6X histidine tag at the 5' end, was prepared by PCR with P703P and the primers of SEQ ID NO: 614 and 615. The cDNA for the fusion of P703P with the truncated form of PSA (referred to as FOPP) was then obtained by PCR using the modified P703P cDNA and the truncated form of PSA cDNA as templates and the primers of SEQ ID NO: 614 and 615. The FOPP

cDNA was cloned into the NdeI site and XhoI site of the expression vector pCRX1, and confirmed by DNA sequencing. The determined cDNA sequence for the fusion construct FOPP is provided in SEQ ID NO: 616, with the amino acid sequence being provided in SEQ ID NO: 617.

- 5 The fusion FOPP was expressed as a single recombinant protein in *E. coli* as follows. The expression plasmid pCRX1FOPP was transformed into the *E. coli* strain BL21-CodonPlus RIL. The transformant was shown to express FOPP protein upon induction with 1 mM IPTG. The culture of the corresponding expression clone was inoculated into 25 ml LB broth containing 50 ug/ml kanamycin and 34 ug/ml chloramphenicol, grown at 37 °C to OD600 of about 1, and stored at 4 °C overnight.
- 10 The culture was diluted into 1 liter of TB LB containing 50 ug/ml kanamycin and 34 ug/ml chloramphenicol, and grown at 37 °C to OD600 of 0.4. IPTG was added to a final concentration of 1 mM, and the culture was incubated at 30 °C for 3 hours. The cells were pelleted by centrifugation at 5,000 RPM for 8 min. To purify the protein, the
- 15 cell pellet was suspended in 25 ml of 10 mM Tris-Cl pH 8.0, 2mM PMSF, complete protease inhibitor and 15 ug lysozyme. The cells were lysed at 4 °C for 30 minutes, sonicated several times and the lysate centrifuged for 30 minutes at 10,000 x g. The precipitate, which contained the inclusion body, was washed twice with 10 mM Tris-Cl pH 8.0 and 1% CHAPS. The inclusion body was dissolved in 40 ml of 10 mM Tris-Cl
- 20 pH 8.0, 100 mM sodium phosphate and 8 M urea. The solution was bound to 8 ml Ni-NTA (Qiagen) for one hour at room temperature. The mixture was poured into a 25 ml column and washed with 50 ml of 10 mM Tris-Cl pH 6.3, 100 mM sodium phosphate, 0.5% DOC and 8M urea. The bound protein was eluted with 350 mM imidazole, 10 mM Tris-Cl pH 8.0, 100 mM sodium phosphate and 8 M urea. The fractions containing
- 25 FOPP proteins were combined and dialyzed extensively against 10 mM Tris-Cl pH 4.6, aliquoted and stored at -70 °C.

EXAMPLE 21

REAL-TIME PCR CHARACTERIZATION OF THE PROSTATE-SPECIFIC ANTIGEN P501S IN
PERIPHERAL BLOOD OF PROSTATE CANCER PATIENTS

- 5 Circulating epithelial cells were isolated from fresh blood of normal individuals and metastatic prostate cancer patients, mRNA isolated and cDNA prepared using real-time PCR procedures. Real-time PCR was performed with the TaqmanTM procedure using both gene specific primers and probes to determine the levels of gene expression.
- 10 Epithelial cells were enriched from blood samples using an immunomagnetic bead separation method (Dynal A.S., Oslo, Norway). Isolated cells were lysed and the magnetic beads removed. The lysate was then processed for poly A+ mRNA isolation using magnetic beads coated with Oligo(dT)25. After washing the beads in buffer, bead/poly A+ RNA samples were suspended in 10 mM Tris HCl pH 8.0
- 15 and subjected to reversed transcription. The resulting cDNA was subjected to real-time PCR using gene specific primers. Beta-actin content was also determined and used for normalization. Samples with P501S copies greater than the mean of the normal samples + 3 standard deviations were considered positive. Real time PCR on blood samples was performed using the TaqmanTM procedure but extending to 50 cycles using
- 20 forward and reverse primers and probes specific for P501S. Of the eight samples tested, 6 were positive for P501S and β -actin signal. The remaining 2 samples had no detectable β -actin or P501S. No P501S signal was observed in the four normal blood samples tested.

25

EXAMPLE 22

EXPRESSION OF THE PROSTATE-SPECIFIC ANTIGENS P703P AND P501S IN
SCID MOUSE-PASSAGED PROSTATE TUMORS

- When considering the effectiveness of antigens in the treatment of
- 30 prostate cancer, the continued presence of the antigens in tumors during androgen

ablation therapy is important. The presence of the prostate-specific antigens P703P and P501S in prostate tumor samples grown in SCID mice in the presence of testosterone was evaluated as follows.

Two prostate tumors that had metastasized to the bone were removed from patients, implanted into SCID mice and grown in the presence of testosterone. Tumors were evaluated for mRNA expression of P703P, P501S and PSA using quantitative real time PCR with the SYBR green assay method. Expression of P703P and P501S in a prostate tumor was used as a positive control and the absence in normal intestine and normal heart as negative controls. In both cases, the specific mRNA was present in late passage tumors. Since the bone metastases were grown in the presence of testosterone, this implies that the presence of these genes would not be lost during androgen ablation therapy.

EXAMPLE 23

ANTI-P503S MONOCLONAL ANTIBODY INHIBITS TUMOR GROWTH *In Vivo*

The ability of the anti-P503S monoclonal antibody 20D4 to suppress tumor formation in mice was examined as follows.

Ten SCID mice were injected subcutaneously with HEK293 cells that expressed P503S. Five mice received 150 micrograms of 20D4 intravenously at day 0 (time of tumor cell injection), day 5 and day 9. Tumor size was measured for 50 days. Of the five animals that received no 20D4, three formed detectable tumors after about 2 weeks which continued to enlarge throughout the study. In contrast, none of the five mice that received 20D4 formed tumors. These results demonstrate that the anti-P503S Mab 20D4 displays potent anti-tumor activity *in vivo*.

EXAMPLE 24

CHARACTERIZATION OF A T CELL RECEPTOR CLONE FROM A P501S-SPECIFIC T CELL CLONE

T cells have a limited lifespan. However, cloning of T cell receptor (TCR) chains and subsequent transfer essentially enables infinite propagation of the T

cell specificity. Cloning of tumor-antigen TCR chains allows the transfer of the specificity into T cells isolated from patients that share the TCR MHC-restricting allele. Such T cells could then be expanded and used in adoptive transfer settings to introduce the tumor antigen specificity into patients carrying tumors that express the antigen. T cell receptor alpha and beta chains from a CD8 T cell clone specific for the prostate-specific antigen P501S were isolated and sequenced as follows.

Total mRNA from 2×10^6 cells from CTL clone 4E5 (described above in Example 12) was isolated using Trizol reagent and cDNA was synthesized. To determine Va and Vb sequences in this clone, a panel of Va and Vb subtype-specific primers was synthesized and used in RT-PCR reactions with cDNA generated from each of the clones. The RT-PCR reactions demonstrated that each of the clones expressed a common Vb sequence that corresponded to the Vb7 subfamily. Furthermore, using cDNA generated from the clone, the Va sequence expressed was determined to be Va6. To clone the full TCR alpha and beta chains from clone 4E5, primers were designed that spanned the initiator and terminator-coding TCR nucleotides. The primers were as follows: TCR Valpha-6 5'(sense): GGATCC---GCCGCCACC---ATGTCACTTTCTAGCCTGCT (SEQ ID NO: 756) BamHI site Kozak TCR alpha sequence TCR alpha 3' (antisense): GTCGAC---TCAGCTGGACCACAGCCGAG (SEQ ID NO: 757) Sall site TCR alpha constant sequence TCR Vbeta-7. 5'(sense): GGATCC---GCCGCCACC---ATGGGCTGCAGGCTGCTCT (SEQ ID NO: 758) BamHI site. Kozak TCR alpha sequence TCR beta 3' (antisense): GTCGAC---TCAGAAATCCTTTCTCTTGAC (SEQ ID NO: 759) Sall site TCR beta constant sequence. Standard 35 cycle RT-PCR reactions were established using cDNA synthesized from the CTL clone and the above primers, employing the proofreading thermostable polymerase PWO (Roche, Nutley, NJ).

The resultant specific bands (approx. 850 bp for alpha and approx. 950 for beta) were ligated into the PCR blunt vector (Invitrogen) and transformed into *E. coli*. *E. coli* transformed with plasmids containing full-length alpha and beta chains were identified, and large scale preparations of the corresponding plasmids were generated. Plasmids containing full-length TCR alpha and beta chains were submitted

for sequencing. The sequencing reactions demonstrated the cloning of full-length TCR alpha and beta chains with the determined cDNA sequences for the Vb and Va chains being shown in SEQ ID NO: 760 and 761, respectively. The corresponding amino acid sequences are shown in SEQ ID NO: 762 and 763, respectively. The Va sequence was
5 shown by nucleotide sequence alignment to be 99% identical (347/348) to Va6.2, and the Vb to be 99% identical to Vb7 (336/338).

From the foregoing it will be appreciated that, although specific
embodiments of the invention have been described herein for purposes of illustration,
10 various modifications may be made without deviating from the spirit and scope of the invention. Accordingly, the invention is not limited except as by the appended claims.

CLAIMS

What is Claimed:

1. An isolated polynucleotide comprising a sequence selected from the group consisting of:

(a) sequences provided in SEQ ID NO: 1-111, 115-171, 173-175, 177, 179-305, 307-315, 326, 328, 330, 332-335, 340-375, 381, 382 and 384-476, 524, 526, 530, 531, 533, 535, 536, 552, 569-572, 587, 591, 593-606, 618-626, 630, 631, 634, 636, 639-655, 674, 680, 681, 711, 713, 716, 720-722, 735, 737-739, 751, 753, 764, 765, 773-776 and 786-788;

(b) complements of the sequences provided in SEQ ID NO: 1-111, 115-171, 173-175, 177, 179-305, 307-315, 326, 328, 330, 332-335, 340-375, 381, 382 and 384-476, 524, 526, 530, 531, 533, 535, 536, 552, 569-572, 587, 591, 593-606, 618-626, 630, 631, 634, 636, 639-655, 674, 680, 681, 711, 713, 716, 720-722, 735, 737-739, 751, 753, 764, 765, 773-776 and 786-788;

(c) sequences consisting of at least 20 contiguous residues of a sequence provided in SEQ ID NO: 1-111, 115-171, 173-175, 177, 179-305, 307-315, 326, 328, 330, 332-335, 340-375, 381, 382 and 384-476, 524, 526, 530, 531, 533, 535, 536, 552, 569-572, 587, 591, 593-606, 618-626, 630, 631, 634, 636, 639-655, 674, 680, 681, 711, 713, 716, 720-722, 735, 737-739, 751, 753, 764, 765, 773-776 and 786-788;

(d) sequences that hybridize to a sequence provided in SEQ ID NO: 1-111, 115-171, 173-175, 177, 179-305, 307-315, 326, 328, 330, 332-335, 340-375, 381, 382 and 384-476, 524, 526, 530, 531, 533, 535, 536, 552, 569-572, 587, 591, 593-606, 618-626, 630, 631, 634, 636, 639-655, 674, 680, 681, 711, 713, 716, 720-722, 735, 737-739, 751, 753, 764, 765, 773-776 and 786-788 under moderately stringent conditions;

(e) sequences having at least 75% identity to a sequence of SEQ ID NO: 1-111, 115-171, 173-175, 177, 179-305, 307-315, 326, 328, 330, 332-335, 340-

375, 381, 382 and 384-476, 524, 526, 530, 531, 533, 535, 536, 552, 569-572, 587, 591, 593-606, 618-626, 630, 631, 634, 636, 639-655, 674, 680, 681, 711, 713, 716, 720-722, 735, 737-739, 751, 753, 764, 765, 773-776 and 786-788;

(f) sequences having at least 90% identity to a sequence of SEQ ID NO: 1-111, 115-171, 173-175, 177, 179-305, 307-315, 326, 328, 330, 332-335, 340-375, 381, 382 and 384-476, 524, 526, 530, 531, 533, 535, 536, 552, 569-572, 587, 591, 593-606, 618-626, 630, 631, 634, 636, 639-655, 674, 680, 681, 711, 713, 716, 720-722, 735, 737-739, 751, 753, 764, 765, 773-776 and 786-788; and

(g) degenerate variants of a sequence provided in SEQ ID NO: 1-111, 115-171, 173-175, 177, 179-305, 307-315, 326, 328, 330, 332-335, 340-375, 381, 382 and 384-476, 524, 526, 530, 531, 533, 535, 536, 552, 569-572, 587, 591, 593-606, 618-626, 630, 631, 634, 636, 639-655, 674, 680, 681, 711, 713, 716, 720-722, 735, 737-739, 751, 753, 764, 765, 773-776 and 786-788.

2. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) sequences recited in SEQ ID NO: 112-114, 172, 176, 178, 327, 329, 331, 336, 339, 376-380, 383, 477-483, 496, 504, 505, 519, 520, 522, 525, 527, 532, 534, 537-551, 553-568, 573-586, 588-590, 592, 627-629, 632, 633, 635, 637, 638, 656-671, 675, 683, 684, 710, 712, 714, 715, 717-719, 723-734, 736, 740-750, 752, 754, 755, 766-772, 777-785 and 789-791;

(b) sequences having at least 70% identity to a sequence of SEQ ID NO: 112-114, 172, 176, 178, 327, 329, 331, 336, 339, 376-380, 383, 477-483, 496, 504, 505, 519, 520, 522, 525, 527, 532, 534, 537-551, 553-568, 573-586, 588-590, 592, 627-629, 632, 633, 635, 637, 638, 656-671, 675, 683, 684, 710, 712, 714, 715, 717-719, 723-734, 736, 740-750, 752, 754, 755, 766-772, 777-785 and 789-791;

(c) sequences having at least 90% identity to a sequence of SEQ ID NO: 112-114, 172, 176, 178, 327, 329, 331, 336, 339, 376-380, 383, 477-483, 496, 504, 505, 519, 520, 522, 525, 527, 532, 534, 537-551, 553-568, 573-586, 588-590, 592, 627-

629, 632, 633, 635, 637, 638, 656-671, 675, 683, 684, 710, 712, 714, 715, 717-719, 723-734, 736, 740-750, 752, 754, 755, 766-772, 777-785 and 789-791;

- (d) sequences encoded by a polynucleotide of claim 1;
- (e) sequences having at least 70% identity to a sequence encoded by a polynucleotide of claim 1; and
- (f) sequences having at least 90% identity to a sequence encoded by a polynucleotide of claim 1.

3. An expression vector comprising a polynucleotide of claim 1 operably linked to an expression control sequence.

4. A host cell transformed or transfected with an expression vector according to claim 3.

5. An isolated antibody, or antigen-binding fragment thereof, that specifically binds to a polypeptide of claim 2.

6. A method for detecting the presence of a cancer in a patient, comprising the steps of:

- (a) obtaining a biological sample from the patient;
- (b) contacting the biological sample with a binding agent that binds to a polypeptide of claim 2;
- (c) detecting in the sample an amount of polypeptide that binds to the binding agent; and
- (d) comparing the amount of polypeptide to a predetermined cut-off value and therefrom determining the presence of a cancer in the patient.

7. A fusion protein comprising at least one polypeptide according to claim 2.

8. The fusion protein of claim 7, wherein the fusion protein comprises a sequence selected from the group consisting of:

(a) sequences provided in SEQ ID NO: 682, 692, 695, 699, 703 and 709; and

(b) sequences encoded by SEQ ID NO: 679, 691, 696, 700, 704 and 708.

9. An oligonucleotide that hybridizes to a sequence recited in SEQ ID NO: 1-111, 115-171, 173-175, 177, 179-305, 307-315, 326, 328, 330, 332-335, 340-375, 381, 382 and 384-476, 524, 526, 530, 531, 533, 535, 536, 552, 569-572, 587, 591, 593-606, 618-626, 630, 631, 634, 636, 639-655, 674, 680, 681, 711, 713, 716, 720-722, 735, 737-739, 751, 753, 764, 765, 773-776 or 786-788 under moderately stringent conditions.

10. A method for stimulating and/or expanding T cells specific for a tumor protein, comprising contacting T cells with at least one component selected from the group consisting of:

(a) polypeptides according to claim 2;
(b) polynucleotides according to claim 1; and
(c) antigen-presenting cells that express a polypeptide according to claim 1,

under conditions and for a time sufficient to permit the stimulation and/or expansion of T cells.

11. An isolated T cell population, comprising T cells prepared according to the method of claim 10.

12. A composition comprising a first component selected from the group consisting of physiologically acceptable carriers and immunostimulants, and a second component selected from the group consisting of:

- (a) polypeptides according to claim 2;
- (b) polynucleotides according to claim 1;
- (c) antibodies according to claim 5;
- (d) fusion proteins according to claim 7;
- (e) T cell populations according to claim 11; and
- (f) antigen presenting cells that express a polypeptide according to

claim 2.

13. A method for stimulating an immune response in a patient, comprising administering to the patient a composition of claim 12.

14. A method for the treatment of a cancer in a patient, comprising administering to the patient a composition of claim 12.

15. A method for determining the presence of a cancer in a patient, comprising the steps of:

- (a) obtaining a biological sample from the patient;
- (b) contacting the biological sample with an oligonucleotide according to claim 9;
- (c) detecting in the sample an amount of a polynucleotide that hybridizes to the oligonucleotide; and
- (d) compare the amount of polynucleotide that hybridizes to the oligonucleotide to a predetermined cut-off value, and therefrom determining the presence of the cancer in the patient.

16. A diagnostic kit comprising at least one oligonucleotide according to claim 9.

17. A diagnostic kit comprising at least one antibody according to claim 5 and a detection reagent, wherein the detection reagent comprises a reporter group.

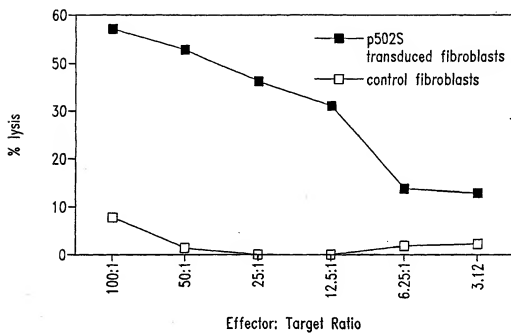
18. A method for inhibiting the development of a cancer in a patient, comprising the steps of:

(a) incubating CD4+ and/or CD8+ T cells isolated from a patient with at least one component selected from the group consisting of: (i) polypeptides according to claim 2; (ii) polynucleotides according to claim 1; and (iii) antigen presenting cells that express a polypeptide of claim 2, such that T cell proliferate; and

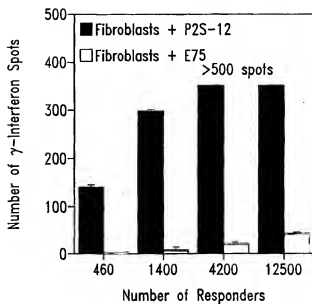
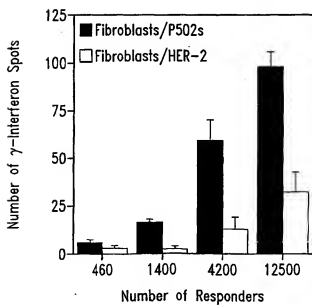
(b) administering to the patient an effective amount of the proliferated T cells,

thereby inhibiting the development of a cancer in the patient.

1/10

*Fig. 1*

2/10

*Fig. 2A**Fig. 2B*

3/10

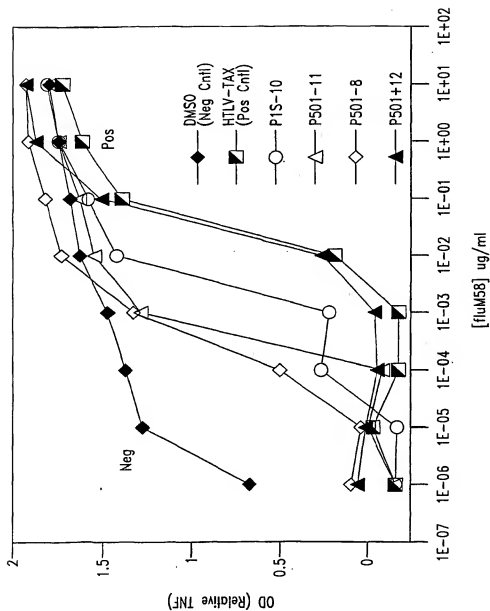
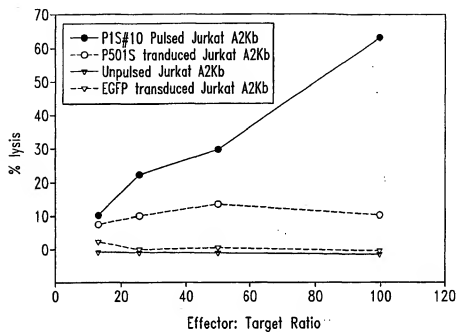
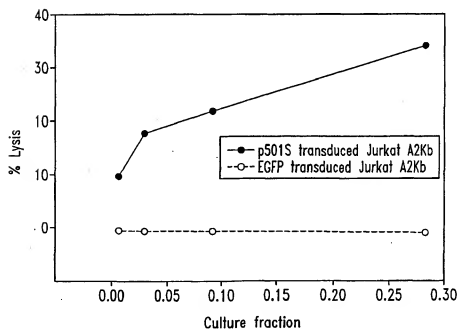
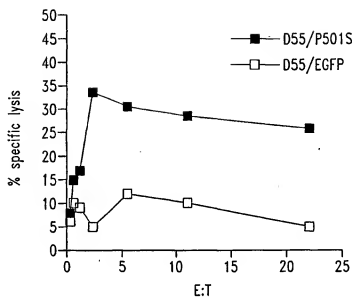
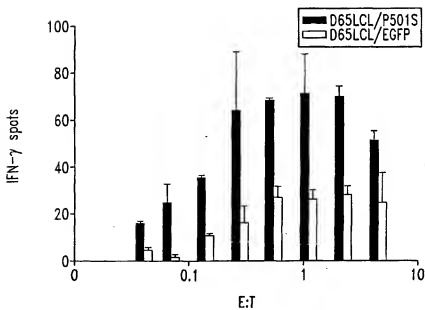


Fig. 3

4/10

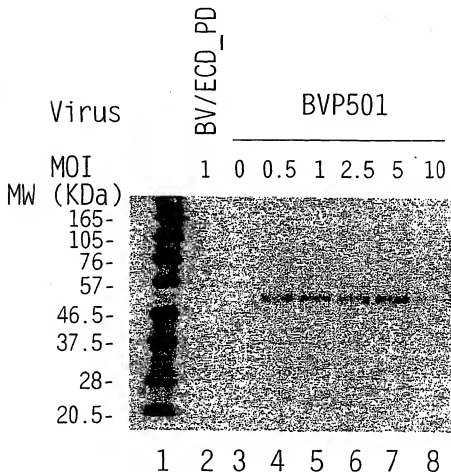
*Fig. 4**Fig. 5*

5/10

*Fig. 6A**Fig. 6B*

6/10

Expression of P501S
by the Baculovirus Expression System



C 6 million high 5 cells in 6-well plate were infected with an unrelated control virus BV/ECD_PD (lane2), without virus (lane3), or with recombinant baculovirus for P501 at different MOIs (lane 4-8). Cell lysates were run on SDS-PAGE under the reducing conditions and analyzed by Western blot with a monoclonal antibody against P501S (P501S-10E3-G403). Lane 1 is the biotinylated protein molecular weight marker (BioLabs).

Fig. 7

FIGURE 8. Mapping of the epitope recognized by 10E3-G4-D3

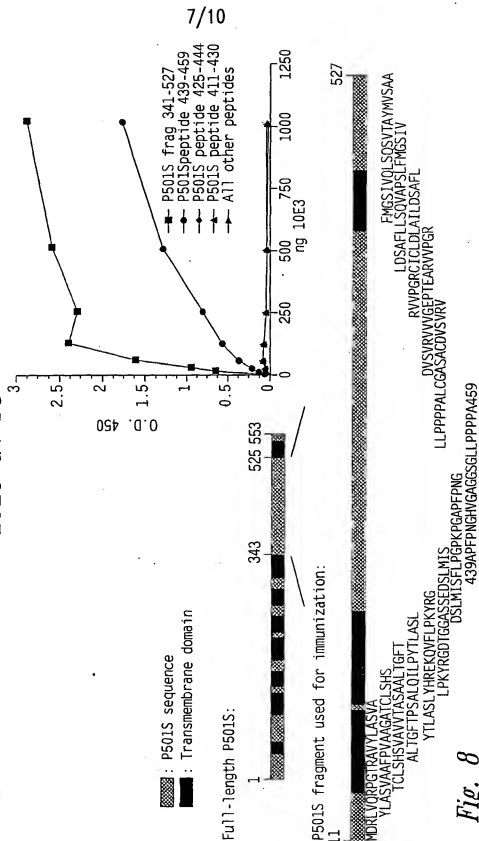


Fig. 8

8/10

Schematic of P501S with predicted
transmembrane, cytoplasmic, and extracellular regions

MVORLWSRLLRHK AQLLLVNLLTFGLEVCLAAGIT YVPPLLEVGVEEKFM
TMVLGIGPVLGLVCYPLLSAS

DHWGRYGRRRP FIWALSGLLSLFLIPRAGWL AGLLCPDPRPLE LALLILGVGLLDGCGQVCFTPL
EALLSDFRDPDHCRO AYSVYAFMISLGGCLGYLLPAI DWDTALAPYLGTQEE

CLFGLLTILFLTEVAATLLV AEEAALGPTEPAEGLSAPSLSPHCCPCRARLAFRNLGALLPRL
HQLCCMRPRTLRR LFVAELCSWMALMTFTLFYTDF VGEGLYQGVPRAPGTEARRHYDEGVR

MGSLGLFLQCAISLVFSLVM DRLVQRFGTRAVYLAS VAAFPVAAGATCLSHSVAVVTA SAA
LTGFTFSALQILPYTLASLY HREKQVFLPKYRGDTGGASSEDLSMTSFLPGPKPGAPFPNGHVAGGSGSL
LPPPPALCGASACDVSVRVVGEPTEARVVPGRG ICLDLAILDSAFLSQVAPSLF MGSIVQLSQS
VTAYMVSAAGLGLVAIYFAT QVVFDSOLAKYSA

Underlined sequence: Predicted transmembrane domain; Bold sequence:
Predicted extracellular domain; *Italic sequence*: Predicted intracellular
domain. Sequence in bold/underlined: used generate polyclonal rabbit
serum

Localization of domains predicted using HMMTOP (G.E. Tusnady and I. Simon
(1998) Principles Governing Amino Acid Composition of Integral Membrane
Proteins: Applications to topology Prediction. J. Mol Biol. 283, 489-506.

Fig. 9

9/10

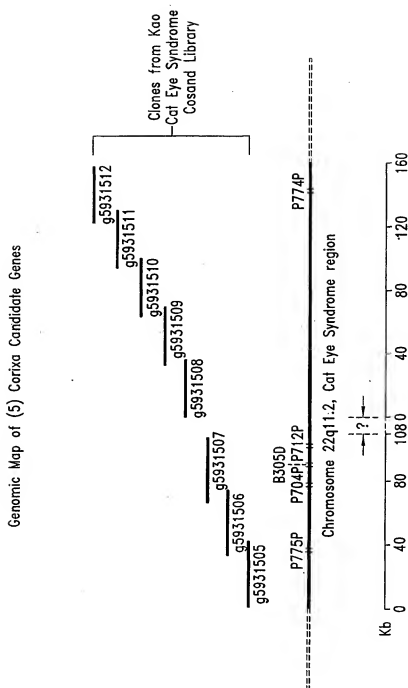


Fig. 10

10/10

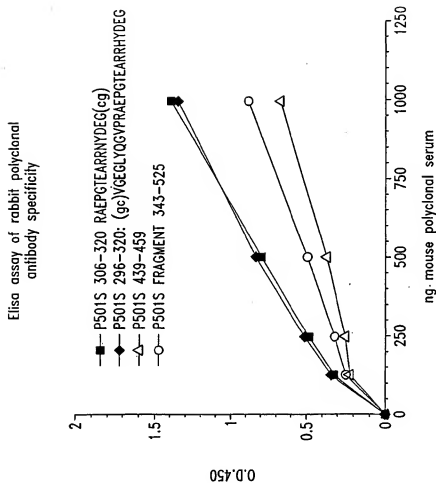


Fig. 11

SEQUENCE LISTING

<110> Corixa Corporation
 Smithkline Beechan Biologicals S.A.
 Xu, Jiangchun
 Dillon, Davin C.
 Mitcham, Jennifer L.
 Harlocker, Susan L.
 Jiang, Yuqui
 Reed, Steven G.
 Kalos, Michael D.
 Fanger, Gary R.
 Retter, Marc W.
 Stolk, John A.
 Day, Craig H.
 Skelky, Yasir A.W.
 Wang, Aijun
 Meagher, Medeleine Joy
 Vanderbrugge, Didier
 Dewerchin, Marianne
 Dehottay, Ph.
 de Rop, Philippe

<120> COMPOSITIONS AND METHODS FOR THE THERAPY AND
 DIAGNOSIS OF PROSTATE CANCER

<130> 210121.42722PC

<140> PCT

<141> 2001-01-16

<160> 792

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 814

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(814)

<223> n = A,T,C or G

<400> 1

tttttttttt	tttttcacag	tataacagct	ctttatttct	gtgagttcta	ctaggaaatc	60
atcaaatctg	agggttgct	ggaggacttc	aatacacctc	ccccatagt	gaatcagctt	120
ccaggggggc	cagtccctct	octtacttca	tcgccatccc	atgccaaaag	aagaccctcc	180
ctccttggtc	cacagccttc	tctaggcttc	ccagtgccctc	caggacagag	tgggttatgt	240
tttcagctcc	atccttgctg	tgagtgctct	gtgcgttggt	cctccagctt	ctgctcaagt	300
cttcatggac	agtgctccag	acatgtcaact	ctccactctc	tcagtggtga	tcactagtgt	360
ctagagcggc	cgccaccgcg	gtggagctcc	agcttttggt	ccctttagtg	agggttaatt	420
gcgcgcttgg	cgtaatactg	gtcataactg	tttcctgtgt	gaaattgtta	tcgcctcaca	480
attccacaca	acatacagcg	cggaagcata	aagtgtaaag	cctgggggtgc	ctaagtgagt	540
anctaactca	cattaattgc	gttcgcctca	ctgnccgctt	tccagtcnng	aaaactgtgc	600
tgccagctgc	attaatgaat	cggccaacgc	ncgggggaaa	gcggtttgcg	ttttgggggc	660

tcttcgcgtt	ctcgcctcact	nantcctgcg	ctcggtcntt	cggtcgcg	gaacgggtatc	720
actcctcaaa	ggnggtatta	cggttatccn	naaatcnggg	gatacccnngg	aaaaaatntt	780
aacaaaagg	cancaaagg	cngaacgta	aaaa			814

<210> 2
 <211> 816
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(816)
 <223> n = A,T,C or G

acagaaatgt	tggatggtgg	agcacctttc	tatacgactt	acaggacagc	agatggggaa	60
tctatggctg	tggagcaaat	agaaccccag	tctacgagc	tgctgatcaa	aggacttgga	120
ctaaagtctg	atgaacttcc	caatcagatg	agcatggatg	attggccaga	aatgaagaag	180
aagtttgcag	atgtatttgc	aaagaagacg	aaggcagagt	gggtgcaaat	ctttgacggc	240
acagatgcct	gtgtgactcc	ggttctgact	tttgaggagg	ttgttcatca	tgatcacac	300
aaggaaagg	gctcgtttat	caccagtgag	gagcaggacg	tgagccccgc	ccctgcacct	360
ctcgtgttaa	acaccccagc	catcccttct	ttcaaaaagg	atccactagt	tctagaaggc	420
gcgcacccg	cggtggagct	ccagettttg	ttccctttag	tgagggttaa	ttgocgcgtt	480
ggcgtaatca	tggtcatagc	tgtttctcgt	gtgaaattgt	tatccgctca	caattccccc	540
aacatcacgag	ccggaacata	aagtgttaag	cctgggggtgc	ctaagtantg	agctaactcn	600
cattaatgtc	gttgccctca	ctgcccgctt	tccagtcggg	aaaactgtcg	tgccactgcn	660
ttantgaate	ngccaccccc	cgggaaaagg	cggttgcnat	ttgggcctct	tccgctttcc	720
tcgctcattg	atccctngcn	ccggtctctg	gctgcggnga	acggttcact	ctctaaaggc	780
ggtntnccgg	ttatccccaa	acnnggggata	ccnnga			816

<210> 3
 <211> 773
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(773)
 <223> n = A,T,C or G

ctttgaaag	aaggatggc	tgggtgtgtt	aacagcagag	gtgcaggggc	ggggctcacg	60
tctgtcctcc	cactggtgat	aaacgagccc	cggtccttgt	tgtagatcatg	atgaacaaac	120
tctcctcaaa	tcagaaccgg	agtcacacag	gcactctgtc	cgctcaaatg	ttgacacccac	180
tcgtccttgc	tcttcttttc	aaatacatct	gcaaacctct	tcttcatctc	tggtccaatca	240
tccatgtcca	tctgattggg	aagttcatca	gactttaagtc	canntccttt	gatcagcagc	300
tcgtagaact	gggttcttat	tgctccaaca	gccatgaatt	ccccatctgc	tgtcctgttaa	360
gtcgtatata	aaggtgtctcc	accatccaac	atgttctgtc	ctcagggggg	ggcccgggtac	420
ccaattcgcc	ctatantgag	tcgtattacg	cgcgctcaact	ggccgtcggtt	ttacaacgtc	480
gtgactggga	aaacccctggg	cgttaccaac	ttaatcgctt	tgacgacat	ccccctttcg	540
ccagctgggc	gtaatancca	aaaggccccg	accgatcgcc	cttccaacag	tttgcgaact	600
gaatgggnaa	atgggacccc	cctgttaccg	cgcattnaac	cccccgnggg	ttttgttgtt	660
accaccaant	nnaccgctta	cactttgcga	gcgccttane	gcccgcctcc	tttenccttt	720
cttcccttcc	tttencnecn	ctttccccgg	gggtttcccc	cntcaaaacc	cna	773

<210> 4
 <211> 828
 <212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(828)

<223> n = A,T,C or G

<400> 4

cctcctgagt	cctactgacc	tgtgctttct	ggtgtggagt	ccagggtctgc	taggaaaaagg	60
aatgggcaga	cacaggtgta	tgccaatggt	tctgaaatgg	gtataatttc	gtcctctcct	120
tcggaacact	ggctgtctct	gaagacttct	cgctcagttt	cagtgaggac	acacacaaag	180
acgtgggtga	ccatgttgtt	tgtgggggtgc	agagatggga	gggggtgggc	ccacctcgga	240
agagtggaca	gtgacacaag	gtggacactc	tctacagatc	actgaggata	agctggagcc	300
acaatgcatg	aggcacacac	acagcaagga	tgacnctgta	aacatagccc	acgctgtcct	360
gnngggcactg	ggaagcctan	atnaggccgt	gagcanaaag	aagggggagga	tccactagtt	420
ctanagcggc	cgccaccgcg	gtgganctcc	ancttttgtt	cccttttagt	agggttaatt	480
gcgcgcttgg	cntaatcatg	gtcatanctn	tttctgtgt	gaaattgtta	tccgctcaca	540
attccacaca	acatacganc	cggaaacata	aantgtaaac	ctgggggtgcc	taatgantga	600
ctaactcaac	tttaattcgt	tgcgctcact	gcccgccttc	caatcnggaa	acctgtcttg	660
ccnctgtcat	tnatgaatcn	gccaaccccc	ggggaaaagc	gtttgcgttt	tgggcgctct	720
tccgcttctc	cnctcantta	ntccctnenc	tcggtcattc	cggtcgngc	aaaccggttc	780
accnctccca	aaggggggtat	tccggtttcc	ccnaatccgg	gganancc		828

<210> 5

<211> 834

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(834)

<223> .n = A,T,C or G

<400> 5

tttttttttt	tttttactga	tagatggaat	ttattaagct	tttcacatgt	gatagcacat	60
agttttaatt	gcattccaag	tactaacaaa	aactctagca	atcaagaatg	gcagcatgtt	120
attttataac	aatcaacacc	tgtggtcttt	aaaatttggt	tttcataaga	taatttatca	180
tgaagttaaa	ctagccatgc	ttttaaaaaa	tgcttttagt	cactccaaag	tgtgcagtta	240
acatttgcca	taaacataaa	taaaacaatc	acaattttaa	aaataacaaa	tacaacattg	300
tagggcataa	tcatatcacg	tataagggaaa	aggtggtagt	gttgagtaag	cagttattag	360
aatagaatcc	cttggccctc	atgcaaatat	gtctagacac	tttgattcac	tcagccctga	420
cattcgattt	tcaagttagg	agacagggtc	tacagtatca	ttttacagtt	tccaacacat	480
tgaaaaacaag	tagaaaaatga	tgagttgatt	tttattaatg	cattacatcc	tcaagagtta	540
tcaccacccc	ctcagttata	aaaaattttc	aagtatatatt	agtcataata	cttggtgtgc	600
ttattttaaa	ttagtgtctaa	atggattaag	tgaagacaac	aatggtcccc	taatgtgatt	660
gatattggtc	atttttacca	gcttctaatt	ctnaaccttc	aggcttttga	actggaacat	720
tgnatnacag	tgttccanag	ttncaaacct	ctggaacatt	acagtggtct	tgattcaaaa	780
tgttattttg	ttaaaaatta	aattttaacc	tgttggaata	ataatttgaa	atna	834

<210> 6

<211> 818

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(818)

<223> n = A,T,C or G

<400> 6

tttttttttt	tttttttttt	aagaccctca	tcaatagatg	gagacataca	gaaatagtca	60
aaccacatct	acaaaagtc	agtatcaggc	ggcgctctcg	aagccaaagt	gatgtttgga	120
tgtaaagtga	aatattagtt	ggcgatgaa	gcagatagtg	aggaaagtgt	agccaataat	180
gacgtgaagt	cggtggagc	ctgtggctac	aaaaaatgtt	gagccgtaga	tgccgtcggg	240
aatggtgaag	ggagactcga	agtactctga	ggctttagtg	agggtaaaat	agagaccag	300
taaaattgta	ataagcagtg	cttgaattat	ttggtttcgg	ttgttttcta	ttagactatg	360
gtgaagctcag	gtgattgata	ctctctgatg	gagtaatacg	gatgtgttta	ggagtgggac	420
ttctagggga	tttagcgggg	tgatgcctgt	tggggggcag	tgccctccta	gttggggggg	480
aggggctagg	ctggagtggt	aaaaggctca	gaaaaatcct	gcgaagaaaa	aaacttctga	540
ggtaataaat	aggattatcc	cgatcgaag	gaccttttgg	acaggtgggt	tgtgtgtggc	600
ttggtatgta	ctttctcggt	ttacatcgcg	ccatcattgg	tatatgttta	gtgtgttggg	660
ttantanggc	ctantatgaa	gaacttttgg	antggaatta	aatcaatncc	ttggcgggaa	720
gtcattanga	nggctnaaaa	ggcctgttta	ngggtctggg	ctnngtttta	cccnaccat	780
ggaatnccmc	ccccggacna	ntgnatcctt	attcttaa			818

<210> 7
 <211> 817
 <212> DNA
 <213> Homo sapien
 <220>
 <221> misc_feature
 <222> (1)...(817)
 <223> n = A,T,C or G

<400> 7

tttttttttt	tttttttttt	tggtctaga	gggggtagag	ggggtgctat	agggtaaaata	60
cgggcccatt	ttcaaaagatt	tttaggggaa	ttaattctag	gacgatgggt	atgaaactgt	120
ggtttgcctc	acagatttca	gagcattgac	cgtagtatac	ccccgctcgt	gtagcgggtga	180
aagtgttggt	gtttagacgt	cgggaattg	catctgtttt	taagcctaata	gtggggacag	240
ctcatgagtg	caagacgtct	tgtgatgtaa	ttattatacn	aatgggggct	tcaatcggga	300
gtactactcg	attgtcaacg	tcaaggagtc	gcagggtgcc	tggttctagg	ataaatgggg	360
gaagtatgta	ggaattgaag	attaatccgc	cgtagtcggt	gttctcctag	gttcaatacc	420
attgttgctga	aattgtattg	atggtaaagg	gagggatcgt	tgaactcgtc	tgttatgttaa	480
aggatnccct	ngggatggga	aggcnatnaa	ggactangga	tnaatggcgg	gcangataatt	540
tcaaacnctc	tctantctct	gaaacgtctg	aaatgttaata	anaaataaan	tttngttatt	600
gaaatntnng	gaaaagggtc	tacaggagcta	gaaacccaat	angaaaanta	atnntaangg	660
cnnatctcnn	aaaggtgnata	acnctccta	tnatccacc	caatngnatt	ccccacnenn	720
acnattggat	ncceccantc	canaaangcg	cnccecccg	tgannccnc	cttttgttcc	780
cttnantgan	ggttattcnc	cctcngcnn	atcanc			817

<210> 8
 <211> 799
 <212> DNA
 <213> Homo sapien
 <220>
 <221> misc_feature
 <222> (1)...(799)
 <223> n = A,T,C or G

<400> 8

catttcgggg	tttactttct	aaggaaagcc	gagcgggaagc	tgctaacgtg	ggaatcgggtg	60
cataaaggaga	actttctgct	ggcacgcgct	agggacaagc	gggagagcga	ctccgagcgt	120
ctgaagcgca	cgtcccagaa	gctgggactg	gcactgaaac	agctggggaca	catccgcgag	180
tacgaacagc	gcttgaagat	gctggagcgg	gaggtccagc	agtgtagccg	cgtcctgggg	240

tgggtggcgc	angcctganc	cgtctgcct	tgtgcccc	angtgggcgc	ccacccctgc	300
acctgctgct	gtccaaacac	tgagccctgc	tggcggaact	caagganaac	ccccacangg	360
ggatttttgt	cctanantaa	ggctcatctg	ggcctcgccc	ccccaccctg	gttggccttg	420
tctttgagtg	gagccccatg	tccatctggg	ccactgtcng	gaccaccttt	ngggaggtgt	480
ctccttacaa	ccacannatg	cccgctcct	cccggaaccc	antccancc	tgngaaggtat	540
caagnccctgn	atccactnnt	nctanaaccc	gcncncccg	cngtggaaac	cnccttntgt	600
tccttttctt	tnagggttaa	tnnccctctg	gccttccan	ngtccctncc	ntttccnnt	660
gttnaaattg	ttangcnccc	nccnntccn	cnnccnccn	cccgaccenn	annttnnann	720
ncctgggggt	ncnncngat	tgaccenncc	nccctntant	tgcnttnggg	nncnntgccc	780
ctttccctct	ngggannccy					799

<210> 9

<211> 801

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(801)

<223> n = A,T,C or G

<400> 9

acgccttgat	cctcccagcg	tgggactggt	tctgggagga	gcggggcatg	ctgtggtttg	60
taangatgac	actcccaaag	gtggctcctga	cagtggccca	gatggacatg	gggtccacct	120
caaggacaag	gccaccaggt	gcgggggcgc	aagccacat	gatccttact	ctatgagcaa	180
aatccctgct	gggggcttct	ccttgaagtc	cgccancagg	gctcagtcct	tggagccang	240
caggctcatg	ggttgtngnc	caactggggg	ccncaacgca	aaangggcna	gggcctcngn	300
caccocatccc	angacgcggc	tacactnctg	gacctccnc	tccaccactt	tcagtgcgtg	360
ttcntaccgc	cgnatntgtc	ccanctgttt	cngtgccnac	tccanctctt	nggacgtgcy	420
ctacatacgc	ccggantcnc	netcccgctt	tgtccctatc	cacgtncocan	caacaaattt	480
cncctantg	caccnattcc	cacttttnc	agntttccnc	nncngngcttc	ctntaaaaag	540
ggttganccc	cggaaaatnc	cccaaagggg	ggggggccmg	tacccaaactn	ccccctnata	600
gctgaantcc	ccatnaccnn	gnctcnatgg	ancnctccnt	tttaannacn	ttctnaactt	660
gggaananc	ctcgncctn	ccccnttaa	tccnccctg	cnangnnct	cccccnctcc	720
ncccnntng	gcntntnann	cnaaaaggcg	ccnnancaa	tctctnncn	cctcanttgc	780
ccancctcgc	aaatcgccgc	c				801

<210> 10

<211> 789

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(789)

<223> n = A,T,C or G

<400> 10

cagtcctatnt	ggccagtggtg	gcagctttcc	ctgtggctgc	cggtgccaca	tgctgtccc	60
acagtgctg	cgtgggtgaca	gcttcagccg	ccctcacccg	gttcaccttc	tcagccctgc	120
agatccctgcc	ctacacactg	gcctccctct	accacgggga	gaagcaggatg	ttctcgccca	180
aatacccgagg	ggacactgga	ggtgctagca	gtgaggacag	cctgatgacc	agcttctctg	240
caggcccgaa	gctggagct	cccttcccta	atggacacgt	gggtgctgga	ggcagtgggc	300
tgttccacc	ttccaccgcg	ctctgggggg	cctctgctg	tgatgtctcc	gtacgtgtgg	360
tggtgggtga	gcccccggan	gccaggggtg	ttccggggcg	gggcatctgc	ctggacctcg	420
ccatcctgga	tagtgcttcc	tgctgtccca	ngtggcccca	tccctgttta	tgggctccat	480
tgtccagctc	agccagctcg	tcactgecta	tatggtgtct	gcgcaggccc	tgggtctggt	540
cccatittact	ttgctacaca	ggtantattt	gacaagaacg	anttggccaa	atactcagcg	600

ttaaaaaatt	ccagcaacat	tgggggtgga	aggcctgcct	cactgggtcc	aactccccgc	660
tctctgttaac	cccatggggc	tgccgggttg	gccgcccaatt	tctgtgtgctg	ccaaantnat	720
gtggctctct	gctgccacct	gttgctggct	gaagtgcnta	cngcncanct	nggggggtng	780
ggngttcccc						789

<210> 11
 <211> 772
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(772)
 <223> n = A,T,C or G

<400> 11						
cccaccctac	ccaaatatta	gacaccaaca	cagaaaagct	agcaatggat	tcccttctac	60
tttgttaaat	aaataagtta	aatattttaa	tgccgtgtgc	tctgtgatgg	caacagagg	120
accaacaggg	cacatcctga	taaaaggtta	gaggggggtg	gatcagcaaa	aagacagtgc	180
tgtgggtgta	ggggacctgg	ttcttgtgtg	ttgccctcca	ggactcttcc	cctacaataa	240
actttcatat	gttcaaatcc	catggaggag	tgtttcatcc	tagaaactcc	catgcaagag	300
ctacattaaa	cgaaagtcca	ggttaagggg	cttanagatg	ggaacccagg	tgactgagtt	360
tattcagctc	ccaaaaaccc	ttctctaggt	gtgtctcaac	taggaggcta	gctgttaacc	420
ctgagcctgg	gtaatccacc	tgacagagtc	ccgcattcca	gtgcatggaa	ccctcttgcg	480
ctccctgtat	aagtccagac	tgaaaccccc	ttggaaggnc	tccagtcagg	cagccctana	540
aactgggggaa	aaaagaaaag	gacgccccan	ccccccagctg	tgcancatcg	cacctcaaca	600
gcacaggggtg	gcagcaaaaa	aaccacttta	ctttggcaca	aacaaaaact	nggggggggca	660
accccgggcac	cccnangggg	gttaacagga	ancngggnaa	cntggaaacc	aattnaggca	720
ggcccccacc	ccnnaatntt	gctgggaat	ttttctctcc	ctaaatntnt	tc	772

<210> 12
 <211> 751
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(751)
 <223> n = A,T,C or G

<400> 12						
gcccacattc	cagctgccac	accacccacg	gtgactgcat	tagttcggat	gtcatacaaa	60
agctgattga	agcaaccctc	tacttttttg	tctgtgagct	ttgtcttggt	gcaggtttca	120
ttggctgtgt	tggtgacgtt	gtcattgcaa	cagaatgggg	gaaaggcact	gttctctttg	180
aagtanggtg	agtcctcaaa	atccgtatag	ttggtgaagc	cacagcactt	gagccctttc	240
atggttggtg	tccacacttg	agtgaagctc	tccctgggaac	cataatcttt	cttgatggca	300
ggcactacga	gcaacgtcac	ggaagtgtct	agccattgtg	gtgtacacca	agggcgaccac	360
agcagctgcn	acctcagcaa	tgaagatgan	gaggangatg	aagaagaacg	tcnccaggggc	420
acacttgctc	tcagttcttan	caccatanca	gcccntgaaa	accaananza	aagaccacna	480
cncggctgtc	gatgaagaaa	tnaccnccng	ttgacaaact	tgcattggca	tggganccac	540
agtgcccnca	aaaatcttca	aaaaggatgc	cccatcnatt	gaccccccaa	atgcccaactg	600
ccaacagggg	ctgccccacn	cnmnaacga	tganccnatt	gnacaagatc	tnctngtgtc	660
atnaaccnt	gaacctcgcn	tngtggctgc	tgttcaggnc	cmnggctga	cttctnaann	720
aangaactcn	gaagncccca	cngganannc	g			751

<210> 13
 <211> 729
 <212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(729)

<223> n = A,T,C or G

<400> 13

gagccagcg	tcctctgccc	tgcccactca	gtggcaacac	cggggagctg	ttttgtcctt	60
tggtgancct	cagcagtncc	ctctttcaga	actcantgcc	aaganccttg	aacaggagcc	120
accatgcagt	gcttcagctt	cattaagacc	atgatgatcc	tcttcaattt	gtccatcttt	180
ctgtgtgtgt	cagccctgtt	ggcagtgggc	atctgggtgt	caatcgatgg	ggcattcctt	240
ctgaagatct	tcggggccact	gtcgtccagt	gccatgcagt	ttgtcaacgt	gggtactctt	300
ctcatcgag	cggcgctgtt	ggtcttagct	ctagggttcc	tgggctgcta	tggtgctaag	360
actgagagca	agtgtgccct	cgtagcgttc	ttcttcaccc	tcctcctcat	cttcattgtt	420
gaggttgcaa	tgctgtggtc	gccttggtgt	acaccacaat	ggctgagcac	ttcctgacgt	480
tgctgtgta	gcctgccatc	aanaaaagat	tatgggttcc	caggaanact	tcactcaagt	540
gttggaacac	caccatga	gggtcgaagt	gctgtggctt	cnnccaacta	tacgattttt	600
gaagantcac	ctacttcaaa	gaaaaanagt	cctttccccc	atttctgttg	caattgacaa	660
acgtcccca	cacagccaat	tgaaaacctg	caccacaacc	aaanggggtc	ccaaccanaa	720
attnaagg						729

<210> 14

<211> 816

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(816)

<223> n = A,T,C or G

<400> 14

tgctcttctc	caaagtgtgt	cttgttgcca	taacaaccac	cataggtaaa	gcggggcgag	60
tggtctgtga	aggggttgtt	gtaccagcgc	gggatgtctt	ccttgagag	tcctgtgtct	120
ggcaggtcca	cgcagtgccc	tttgtcactg	gggaaatgga	tgcgtggag	ctcgtcaaa	180
ccactcgtgt	atttttcaca	ggcagcctcg	tcgcagcgtt	cggggcagtt	gggggtgtct	240
tcacactcca	ggaaaactgtc	natgcagcac	ccattgtctg	agcggaaactg	ggtgggtctg	300
cangtgccag	agcacactgt	atggcgccctt	tccatgnnan	gggcccctng	ggaaagtcct	360
tganocccan	anctgectct	caaangcccc	acottgcaca	ccccgcaggg	ctagaatgga	420
atctcttccc	cgaaaaggtag	ttnttcttgt	tgcccaancc	anccccntaa	acaaaactctt	480
gcanaatctg	tcggnggggg	tcntantacc	anctgtggaa	aagaaaccca	ggcngcgac	540
caancttgtt	tggaatncgaa	gcnaataatc	ncnttctctg	ttgggtggaca	gcaccantna	600
ctgtnnanct	ttagnccntg	gtcctcntgt	gttgnncttg	aacctaatcn	ccnntcaact	660
gggacaaggt	aantngcctt	cctttnaatt	cccnancntn	ccccctgggt	tggggttttn	720
cncnctccta	ccccagaaan	ncogtgttcc	cccccaacta	ggggccnaaa	ccnntnttct	780
cacacccctn	ccccaccacc	gggttcngnt	ggttng			816

<210> 15

<211> 783

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(783)

<223> n = A,T,C or G

<400> 15
 ccaaggcctg ggcaggcata nacttgaagg tacaacccca ggaaccocctg gtgctgaagg 60
 atgttgaaaa cacagatttg cgctactgc ggggtgacac ggaatgcagg gttagagagga 120
 aagaccacaaa ccaggtggaa ctgtggggac tcaaggaang cactacctgc ttccagctga 180
 cagtgaactg ctcagaccac ccagaggaca cggccaacgt cacagtcact gtgctgtcca 240
 ccaagcagac agaagctac tgctctgcct ccaacaangt gggctgcgtc cgggctcttt 300
 tccccgcgtg gtactatgac cccacggagc agatctgcaa gaggtttctt tatggaggct 360
 gcttgggcaa caagaacaac taccttcggg aagaagagtg cattctancc tgtcmgggtg 420
 tgaaggtgg gcttttgana ngancctctg gggctcangc gactttcccc caggggccctt 480
 ccatggaaag gcgcacatcca ntgttctctg gcacctgtca gccacccag ttccgtgca 540
 ncaatggctg ctgcatcnac antttctctg aattgtgaca acacccccca ntgcgcccga 600
 cctctccaac aaagcttccc tgttnaaaaa tacnccantt ggctttttac aacncccggt 660
 cncctccttt ttcccnnntn aacaaggggc nctngccttt gaactgccc naccnnggaa 720
 tctnccnngg aaaaantncc cccctcggtt cctnnaance cctccncaa anctncccc 780
 ccc 783

<210> 16
 <211> 801
 <212> DNA
 <213> Homo sapien
 <220>
 <221> misc_feature
 <222> (1)... (801)
 <223> n = A,T,C or G

<400> 16
 gccccaatc cagctgccac accaccacag gtgactgcat tagttcggat gtcatacaaa 60
 agctgatga agcaacccct tacttttttg tctgtgagct tttgcttgg gcaagtttca 120
 ttgtgtctgt ttgtgacgtt gtcatcgcaa cagaatgggg gaaagccact gttctctttg 180
 aagtaggggt agtctcaaaa atccgtatag ttgtggaagc cacagcactt gagccctttc 240
 atggtggtgt tccacacttg agtgaagtct tcttggggaa cataatcttt ctgtatggca 300
 ggcaactacca gcaagctgac gaagtgtctc gccattgtgg tgtacaccaa ggcagaccac 360
 gcagctgcaa cctcagcaat gaagatgagg aggagatga agaagaactg cncgagggca 420
 cactgtctct cgtctttagc accatagcag ccangaanaac caagagcaaa gaccaacaag 480
 cncgtgcga atgaagaagaa ntacccacgt tgacaaactg catggccact ggacgacagt 540
 tggcccgaa atcttcagaa aagggatgcc ccatcgattg aacaccanaa tgcccactgc 600
 cncacaggct gcncncncn gaaagaatga ccatgtgaag aaggatctnc ntgtctctaa 660
 tgaactgaaa cntgcatgg tggccctctg tcagggtctt tggcagtgaa ttctganaaa 720
 aaggaacncc ntnagcccc ccaanganaa aaacaccccc ggggtgtgccc ctgaattggc 780
 ggccaaggan cctgccccn g 801

<210> 17
 <211> 740
 <212> DNA
 <213> Homo sapien
 <220>
 <221> misc_feature
 <222> (1)... (740)
 <223> n = A,T,C or G

<400> 17
 gtgagagcca ggcgtccctc tgccctgcca ctacgtggca acacccggga gctgttttgt 60
 cctttgtgga gcttcagcag ttccctcttt cagaactcac tgccaagagc cctgaacagg 120
 agccacacat cagtgtctca gcttcattaa gaccatgat atctcttca atttgtctat 180
 ctttctgtgt ggtgcagccc ttgtggcagt gggcatctgg gtgtcaatcg atggggcatc 240
 ctttctgaa atctcgggc cactgtctgc cagtgtctgc cagtgtgtca acgtgggcta 300

cttctctcatc	gcagccggcg	ttgtgggtctt	tgctcttggt	ttctggggct	gctatgggtgc	360
taagacgggag	agcaagtgtg	ccctcgtgac	gttctctcttc	atcctcctccc	tcattcttcac	420
tgctgaagtt	gcagctgctg	tggtcgccct	gggtgtacacc	acaatggctg	aaccattcct	480
gacgttgctg	gtantgcctg	ccatcaanaa	agatttatggg	ttcccaggaa	aaattcactc	540
aantntggaa	caccnccatg	aaaagggtct	caatttctgn	tggtctcccc	aacataccgg	600
gaattttgaa	agantcnccc	tacttccaaa	aaaaaanant	tgcccttnc	ccnttctgt	660
tgcattgaaa	acntcccaan	acngccaatn	aaaacotgcc	cnnncaaaaa	ggnntcncaa	720
caaaaaaant	nnaagggttn					740

<210> 18
 <211> 802
 <212> DNA
 <213> Homo sapien
 <220>
 <221> misc_feature
 <222> (1)...(802)
 <223> n = A, T, C or G

<400> 18						
ccgctgggtg	cgctgtgtcca	gngnagccac	gaagcacgctc	agcatacac	gootcaatca	60
caaggtctctc	cagctgcgcg	acattacgca	gggcaagagc	ctccagcaac	actgcatatg	120
ggatacaatt	tactttatga	gccagggtga	caactgagag	gtgtcgaagc	ttattcttct	180
gagcctctgt	tagtgaggga	agattccggg	cttcagctaa	gtatgcagcg	tatgtcccat	240
aagcaaacac	tgtgagcagc	cggagggtag	aggcaaaatc	actctcagcc	agctctctaa	300
catgtggcat	gtccagcgat	tctccaaaca	cgtagacacc	agnngccctc	agcacctgat	360
ggatgagtg	ggccagcgct	gcccccttgg	cgcacttggc	taggagcaga	aattgtcct	420
ggttctgcgc	tgtcaccttc	acttccgcac	tcatcactgc	actgagtggt	ggggacttgg	480
gtccagagtg	tccagagacg	tggttccgcc	ccctcncctt	atgacaccgn	ccanncaacc	540
gtcgctcccc	gcgagtgng	ttcgtcgtnc	ctgggtcagg	gtctgctggc	cncactttgc	600
aanccttcgt	nggcccatgg	aattcacnnc	accggaactn	gtangatcca	ctnnttctat	660
aaccggngcg	caccgcnnnt	ggaactccac	tcttnttnc	tttacttgag	ggttaaggtc	720
acccttncgc	tactccttgg	ccaaaccntn	ccttgtgtcg	anatngtnaa	tcngngcnca	780
tnccancncc	atangaagcc	ng				802

<210> 19
 <211> 731
 <212> DNA
 <213> Homo sapien
 <220>
 <221> misc_feature
 <222> (1)...(731)
 <223> n = A, T, C or G

<400> 19						
cnaagcttcc	aggtnacggg	ccgcnaaanc	tgaccnaggt	tancanaang	cagnnccggg	60
gagcccaacc	tcacggngng	gngtctttat	nggagggggc	ggagccacat	cncgtggacnt	120
catcagccca	actccgcncc	nncncaatga	gtgatgagtg	cagaactgaa	ggtnaagctgg	180
cagggaacc	gancaaannc	tgctcncntc	caagtccgcn	nagggggcgg	ggctggccac	240
gncatcctnt	cnagtgtcgt	aaagccccnn	cctgtctact	tgtttgagga	acngcnngga	300
catgccccagn	gttanataac	nggcngagag	tnantttgcc	tctcccttcc	ggctggcgcan	360
cgngntngct	tagnggacat	aacctgacta	cttaactgaa	cccnngaatic	tnccnccctc	420
ccaactaagct	cagaacaaaa	aacttcgaca	ccactcaant	gtcacctgnc	tgctcaagta	480
aagtgtaccc	catncccaat	gtntgctnga	ngctctgncc	tgcnttangt	tcggtcctcg	540
gaagacctct	caattnaagc	tatgtttctg	actgcctctt	gctccctgna	acaanccncc	600
cnnncntcca	agggggggnc	ggcccccaat	cccccccaac	ntnaaattnan	tttancccn	660
ccccngggcc	cggtccttta	cnanctcnn	nnacnnggna	aaacnnggc	tttncnccac	720

nnaatccncc t

731

<210> 20
 <211> 754
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(754)
 <223> n = A,T,C or G

<400> 20
 tttttttttt tttttttttt taataaacccc ctcatttnaa tgnaaacttc cgaattgtgc 60
 caacccccc ctcacaaatnn cctttccgg gnggggggttc caaacccaan ttanntttgg 120
 annttaaat aaatnttntn tggnggnnna anccnaatgt nangaaagt naaccanta 180
 tnancttnaa tncctggaaa ccngtngntt ccaaaaatnt ttaaccctta antccctccg 240
 aaatngttna nggaaaaccc aaattctcnt aaggtgtttt gaaggntnaa tnaaaanccc 300
 nnccaatgt ttttngccac gcctgaatta attgnttcc gntgttttcc nttaaaanaa 360
 ggnnancccc ggttantnaa tcccccnnc cccaattata ccgantttt ttngaattgg 420
 gancnccgg gaattaacgg gmnnttccc tnttgggggg cnggncccc cccnctcggg 480
 ggttnggnc aggnnnaat tgtttaaggg tccgaaaaat cccctcnaga aaaaaanctc 540
 ccagntgag nntngggtt ncccccccc canggccct ctcgnanagt tggggtttgg 600
 ggggctcggg atttttttc cctntttnc tcccccccc cnggganag aggttngnt 660
 tttgntnnc ggcccnccn aaganccttn ccgatttnan ttaaatccnt gcctnggcga 720
 agtcnctgn agggntaaan ggccccctnn cggg 754

<210> 21
 <211> 755
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(755)
 <223> n = A,T,C or G

<400> 21
 atcancocat gaccnnaac nngggaccnc tcancggnc nnnnacenc cggcnatca 60
 nngtnagnc actnccnttn natcaacccc cncnactac gcccnananc cnacgnccta 120
 nncanctnc actganngcg cgangtngan ngagaaanct nataccanag nccanacan 180
 ccagctgtcc nanaangcct nnnatacngg nnnatccaat ntgnanccctc cnaagtattn 240
 nncnccanct gatttctctn anccgattac centncccc tanccctcc cccccaaacn 300
 cgaagcgnct ggnccnaagg nngcgnccc ccgctagnt cccnccaagt cmcncccta 360
 aactcancn nattacnccg ttcttgagta tcactcccg aatctcaccc tactcaactc 420
 aaaaanactn gatacaaaa atncaagcc tgnttatnac actntgactg ggtctctatt 480
 ttagngtcc ntnaancntc ctaatacttc cagctctncc tcnccaattt ccnaanggct 540
 ctttngaca gcatnttttg gttcccnntt ggggtcttan ngaattgccc ttctntgaac 600
 gggctctct ttctctcgg ttanccctgn ttcnccggc cagttattat ttccctttt 660
 aaattctncc cntttanttt tggcctttna aacccccggc cttgaaaacg gccccctggt 720
 aaaaggtgt tttganaaaa tttttgtttt gtccc 755

<210> 22
 <211> 849
 <212> DNA
 <213> Homo sapien

<220>

<221> misc_feature
 <222> (1)...(849)
 <223> n = A,T,C or G

<400> 22

tttttttttt	tttttangtg	tngtcgtgca	ggtagaggct	tactacaant	gtgaanacgt	60
acgctnggan	taangcgacc	cgantttctag	gannncocct	aaaatcanac	tgtgaagatn	120
atcctganna	cggaaangtc	accggnngat	nntgtctagg	tgncnctccc	canncnttn	180
cataactcng	nggcctggcc	caccaccttc	ggcgcccccng	ngncocgggcc	cggttcattn	240
gnnttaaacn	cactnngcna	ncgggtttccn	ncoccnncng	accnngcgga	tccgggggtnc	300
tctgtcttcc	cctgnagncn	anaaantggg	ccnccgnccc	ctttaccocct	nnacaagcca	360
cngcctctca	ncncnccccc	ccctcccant	nnnggggact	gcncanngct	ccgttntctng	420
nnaccccnnn	gggtncctcg	gttgtcgant	cnacognang	ccanggatcc	cnaagggaag	480
tgcgttnttg	gccctacccc	ttcgtctnccg	nnaccccttc	ccgacnanga	ncocgtccc	540
cnncnccngn	cctcnccctg	caacacccgc	ncctcntngt	ncggnncccc	ccccacccgc	600
ncctcncnc	ngncgnancn	ctccnccncc	gtctcannca	ccaccccgcc	ccgccagccc	660
ntcanccacn	ggnnagcngn	nagcncnntc	gcncccgcgn	gcgncnccct	cgcnccngaa	720
ctcncntcng	ccantnncgc	tcaanccnna	cnaaacgcgc	ctgcgcggcc	cgncgcgncc	780
ncctccncca	gtcctcccg	cttcnacc	angnntccn	cgaggacaen	nnaccccgcc	840
nnccangcgg						849

<210> 23
 <211> 872
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(872)
 <223> n = A,T,C or G

<400> 23

gcgcacaaacta	tacttcgctc	gnaactcgtgc	gcctcgtctc	tcttttctcc	cgcaaccatg	60
tctgacnanc	cggatnnggc	ngatatcnan	aagntcganc	agtcacaaat	gantaacaca	120
cacancnncan	aganaaatcc	ntcgtcttcc	anagtanacn	attgaacnng	agaaccangc	180
nggcggaatcg	taatnaggcg	tgcgcgcgcca	atntgtcncc	gtttatntn	ccagntcnc	240
cttccnacc	tactctctcn	nagctgtcnn	accctnngtn	cgnacccccc	naggtcggga	300
tccgggtttnn	nntgaccngn	cncccccctcc	ccccctccat	nacgancncc	ccgcacaccc	360
nanngcncgc	ccccccnctc	cttcgcnccc	ctgtctctn	ccccgtngc	ctggcncngn	420
accgcattga	ccctcgcccn	ctnccnngaaa	ncgnanacgt	ccgggttgnn	annancgctg	480
tgggnnngcg	tctgcncgcg	gttccttccn	ncnncctcca	ccatctctnt	tacnnggtct	540
ccnccgctc	ctnnncaacn	cctgggagcg	ntctctntgc	cccccttnac	tccccccttt	600
cgnctgtgccc	cgncccccacc	ntcatttnca	nacgntcttc	acaannnccct	ggnntnctcc	660
cnancnngcn	gtcancnng	ggaaaggngg	ggnnccnntg	nttgacgttg	ngngngangtc	720
cgaanantcc	ctcncctcan	cncctaccct	cgggcggnct	ctcngttncc	aacttancaa	780
ntctccccc	ngngcncctc	tcagcctcnc	ccnccccnct	ctctgcantg	tnctctgctc	840
tnacnntnac	gantnttgc	cncctcttt	cc			872

<210> 24
 <211> 815
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(815)
 <223> n = A,T,C or G

```

<400> 24
gcactgaagc ttgagtattc tatagngtca octaaatanc ttggcmtaat catggtcnta      60
nctgntctcc tgtgtcaaat gtatacnaaa tanatatgaa tctnatntga caagannngta      120
tctncaatta gtaacaantg tnnrtgcat octgtcngan canattccca tnnattncgn      180
cgcattcnnc gncantatn taatngggaa tcnnnntnnn ncacnncnat ctatcntncc      240
gcnccctgac tggnaagat ggatnantt tnnrtngacc nacatgttca tcttggtatn      300
aaancccccc cgcngnccac cgggtngnng cnagccnntc ccaagacctc ctgtggagggt      360
aacctgctgc aganncatca aacntgggaa accgcgnccc angtnnaagt ngmnnanana      420
gatcccgctc agnntnacc atcccttcnc aggcgccctc ttngtgcctt anagnngnagc      480
gtgtccnanc cncatcaact ganacgcgcc agnccanccg caatnngcca caatgtcgnc      540
gaacccccct gggggantna tncaaanccc caggattgtc cncncangaa atcccnanc      600
ccnccctacc cncnctttgg gacngtgacc aantcccga gtnccagctc ggcngnccn      660
cccccccggt nncntgggg ggggtgaact cngnntcanc cngncgaggn ntcgnaagga      720
accggnccct gngcgaanng ancnntcnga agngccnctc cgtatacccc cccctcncca      780
nccnncngnt agntcccccc cngggtncgg aangg                                     815

<210> 25
<211> 775
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(775)
<223> n = A,T,C or G

<400> 25
ccgagatgtc tgcgtccgtg gccttagctg tgcgtgcgct actctctctt tctggcctgg      60
aggctatcca gcgtactcca aagattcagg ttacttcacg tcatccagca gagaattggaa      120
agtcaaatct cctgaattgc tatgtgtctg ggtttcatcc atocgacatt gaanttgact      180
tactgaagaa tgganagaga attgaaaaag tggagcattc agacttgtct ttcagcaagg      240
actggtcttt ctatctctng tactacactg aattcacccc cactgaaaaa gatgagtatg      300
cctgcgctgt gaacctatgt actttgtcac agcccaagat agttaagtgg gatcgagaca      360
tgtaaacagn cnnatgggaa gtttgaagat gcgcatttg gattggatga attocaaatt      420
ctgctgtctt gcnttttaat antgatatgc ntatacccc taccctttat gnncccaaat      480
tgtagggggt acatnangt tcnctnnga catgatcttc ctttataant cncncttcg      540
aattgcccgt cncnctgntn ngaatgtttc cnaaaccacg gttggctccc ccagctcncc      600
tcttacggaa ggcctggggc cncctttncaa ggttggggga accnaaaatt tcnctntgc      660
cmccccncca cnnctctngn nncnctntt ggaacccctc cnatccccc tggcctcnna      720
ncttntncta anaaaaactn aaanctngtc naaanntttn acttcccccc ttacc       775

<210> 26
<211> 820
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(820)
<223> n = A,T,C or G

<400> 26
anattatnac agtgaatct tttcccagag gtgtgtanag ggaacggggc ctagaggcat      60
ccanagata ncttatnaca acagtgtctt gaccaagagc tgcgtgggcac atttccgtga      120
gaaaggctgg cgttcccact cactcctcct ctcccatagc catccagagc ggggtgagta      180
ccatcangoc ttcggtggga gggagtcang gaaacaacac accacagagc anacagacca      240
ntgatgacca tgggggggag cgagcctctt cctgtgnacc ggggtggcna nganagocct      300
nctgaggggt cacactataa acgttaacga ccnagatnan cactgtcttc aagtgacccc      360

```

ttctacactg	acnaccagng	accnnnaact	gcngcctggg	gacagcncgt	ggancagcta	420
acnnagcact	cacctgcccc	cccatggcgg	tnccgntccc	tggtcctgnc	aagggaaagt	480
ccctgttgga	attncgggga	naocaaaggga	ncocccctct	ccancctgtga	agggaaaann	540
gatggaattt	tncccttcgg	gcenntcccc	tcttccctta	cacgccccct	ntactcctc	600
tcctctnttt	ntcctgncnc	acttttnacc	ccnnnatctc	ccttnattga	tgggannctn	660
ganattccac	tnncgcctnc	cntcnatcng	naanaacnaa	nactntctna	cccgggggat	720
gggnnccctg	ntcatcctct	cttttctnct	acncccnntt	cttgcctctc	ccttngatca	780
tccaacctc	gntggcctn	ccccccnnn	tcctttncce			820

<210> 27

<211> 818

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(818)

<223> n = A,T,C or G

<400> 27

tctgggtgat	ggcctcttcc	tcctcaggga	cctctgactg	ctctggggca	aagaatctct	60
tgttttctct	cogagcccca	ggcagcgggtg	attcagccct	goccaacctg	attctgatga	120
ctggcgatgc	tgtgacgggc	ccaaggggca	aatagggtgc	cagggtccag	ggaggggcgc	180
ctgctgagca	cttcgcggcc	tcacctgcc	cagccctcgc	catgagctct	gggctgggtc	240
tcgcctcaga	gggtctctgt	cttccagcca	ngccanccag	tggtcgtggg	ccacactggc	300
ttcttcctgc	ccctccctgt	gctctganc	ctctgtctcc	tgctcgtgc	angcnccctg	360
gatctcagtt	tcctcctctc	anngaacctc	gtttctgann	ttctcaantta	actntgantt	420
tatnacnanc	tgngctgtnc	tgtcnnaact	taatggggcn	gacgggctaa	tccttccctc	480
ntcccttccc	antctmnnna	acnngcttnc	cntctctccc	ccntancocg	ccnggggaanc	540
ctcctttggc	ctnacccang	gcennnaccc	ccentnnctn	ggggggcnng	gtnnctnccn	600
ctgntnnccc	cnctcnccnt	tnccctgtcc	cnncnncgcn	nnccancttc	cnngtccccc	660
tnnctcttcc	ngnttcgnaa	ngntcnctn	tnnnnnngcn	ngntnnctn	tcctctcnc	720
cnnttgngang	tnnttnnnnc	ncngnncccc	nnnnnnnnnn	ngnnnnnnnn	tcctnccnng	780
cccncccccc	ngnattaaag	cctccnntct	cogggcnc			818

<210> 28

<211> 731

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(731)

<223> n = A,T,C or G

<400> 28

aggaaggcgc	gagggatatt	gtangggatt	gagggatagg	agnataangg	gggaggtgtg	60
gtcccaacatg	anggtgnggt	ttctctttga	angagggttg	ngtttttann	ccnggtgggt	120
gattnaaccc	catgtatagg	agnnaaagg	tttnagggat	ttttcgcttc	ttctcagtat	180
ntanattctct	gtnaatcgga	aatnatnttt	tcnnccngaa	aatnttgctc	ccatccgnaa	240
attnctcccg	ggtagtgcac	nttnggggg	cngccangtt	tcgccaggtg	ctanaatcgt	300
actaaagntt	naagtgggan	tncaaatgaa	aacctnncc	agagnatccn	tcaccgactg	360
tnnnntnctc	tcggccctng	actctgcnn	agcccaatcc	ccnnngnatt	gtcncccnng	420
nnngcgcnnc	tgaaannnnc	tcgnggctnn	gagcatcang	gggtttogca	tcaaaagcnn	480
cgtttcncat	naaggcactt	tnccctcatc	caacnctng	ccctcnccca	tttngcgcgc	540
nggttcnctc	acgctnnng	cnccctnnnn	ganattttnc	cogcctnggg	naancctcct	600
gnaatgggta	ggngcttctc	ttttnacnnc	gnggtntact	aatcnctncc	acgcntnctt	660
tctcnacccc	cccccttttt	caatcccnnc	ggcnaatggg	gtctcccnnc	cgangggggg	720

nnncccaann c

731

<210> 29
 <211> 822
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(822)
 <223> n = A,T,C or G

<400> 29

actagtccag	tgtggtggaa	ttccattgtg	ttggggncnc	ttctatgant	antnttagat	60
cgctcanacc	tcacancctc	ccnancngc	ctataangaa	nannaataga	ncgtgncnnt	120
atntntacnc	tcatanncct	cnncaccac	tcctctctaa	ccctactgtg	gcctatngcn	180
tnnctantct	ntgcgcctn	cnanccacn	gtggggccnac	cnncnngnatt	ctcncatctcc	240
tcnccatntn	gcctananta	ngtncatacc	ctatacctac	nccaatgcta	nnnctaancn	300
tcocatnantt	annntaacta	ccaactgacnt	ngactttcnc	atnaactctc	aatttgaate	360
tactctgact	cccacngcct	annnattagc	ancntcccc	nacnatntct	caacccaate	420
ntcaacaacc	tatctantct	ttcnccaacc	ntnncctccg	atccccnnac	aacccccctc	480
ccaataacc	cccactcgac	ncctaaccn	caccatcccg	gcaagccnan	ggncatttan	540
ccaactggaa	caacnattgga	naaaaaaac	ccnaactctc	tancncnnat	ctccctaana	600
aatnctcctn	naatttactn	ncantnccat	caancccaacn	tgaaacnnaa	ccccgtgttt	660
tanatccctt	ctttcgaaaa	ccnacccttt	annncccaac	cttttgggccc	cccccnctnc	720
ccnaatgaag	gncncccaat	cnangaaacg	nccntgaaaa	ancnaggcna	anannntccg	780
canatccctat	cccttattnt	ggggnccttt	ccccngggcc	cc		822

<210> 30
 <211> 787
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(787)
 <223> n = A,T,C or G

<400> 30

cggcgcctg	ctctggcaca	tgcctcctga	atggcatcaa	aagtgatgga	ctgcccattg	60
ctagagaaga	cctctctctc	tactgtcatt	atggagccct	gcagactgag	ggctcccctt	120
gtctgcagga	tttgatgtct	gaagtctgtg	agtggtgctt	ggagctctct	atctacaatna	180
gctggaagcg	ctggagggcc	tctctcgcca	gctcccccct	ttctccacg	ctctccangg	240
acacagggg	ctccaggcag	cccattatct	ccagnangac	atggtgtttc	tcacgcggga	300
cccattgggg	ctgnaaggcc	agggtctcct	ttgacacccat	ctctcccgct	ctgctctggca	360
ggccgtggga	tcactanttt	ctanaacggg	cgccacnccg	gtgggagctc	cagcttttgt	420
tcctnttaat	gaaggttaat	tgcnogcttg	gcgtaatcat	nggtcanaac	tnnttctctg	480
gtgaaattgt	ttntccccc	ncnatctcnc	ncnecatnnc	aaccgggaan	cataaagtgt	540
taaaagcctg	gggtngcctn	nngaataaac	tnaactcaat	taatttgcgt	ggctcatggc	600
ccgctttccn	ctcngaaaaa	ctgtcctccc	ctgcnttnt	gaatcggcca	ccccccnggg	660
aaaaagcgtt	tgcnttttng	ggggntccct	ccncttcccc	ccctcncnna	ccctncgcct	720
cggtcgttnc	nggtngcggg	gaanggggat	nnnctccnnc	naagggggng	agnnngntat	780
ccccaaa						787

<210> 31
 <211> 799
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(799)
 <223> n = A,T,C or G

<400> 31
 tttttttttt tttttttggc gatgctactg ttttaattgca ggaggtgggg gtgtgtgtac 60
 catgtaccag ggctattaga agcaagaagg aaggaggagg ggcagagcgc cctgtgtgagc 120
 aacaaaggac tcctgcagcc ttctctgtct gtctcttgcc gcaggcacat ggggaggcct 180
 ccggcagggt gggggccacc agtccagggg tgggagcact acanggggtg ggaagtgggtg 240
 gtggctggtn cnaatggcct gncacanatc cctacgattc ttgacacctg gatttcacca 300
 ggggaccttc tgttctccca nggnaacttc nttnatctcn aaagaacaca actgttttct 360
 cngcanttct ggctgttcat ggaagacaca ggtgtccnat ttnggctggg acttgtgtaca 420
 tatgtgtccg gccacacctc ccctcnnaan aagtaattca ccccccccn cntctnttg 480
 cctgggacct taantaccac caccggaaact canttanta ttcatcttng gntgggcttg 540
 ntatncncn cctgaangcg ccaagttgaa aggccacgcc gtncnctc cccatagnan 600
 nttttncnt canctaagtc cccccnggc aacnatccaa tcccccccn tgggggcccc 660
 agccnangcg ccccgactcg gmnncnngn cncgnantcc ccaggntctc ccantcngmc 720
 ccmnngcncc cccgcacgca gaacanaagg ntngagccnc cgcannnnnn nggtnnncac 780
 ctgcgccccc cenncgngg 799

<210> 32
 <211> 789
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(789)
 <223> n = A,T,C or G

<400> 32
 tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 60
 ttttttccnag ggcaggttta ttgacaacct cncgggacac aancaggctg gggacaggagc 120
 ggcacaaggc tccggggcgg gggcggcgcc cctacacctg ggtaccaaat ntgcagccctc 180
 cgctcccgct tgaatntcct ctgcagctgc aggatgccnt aaaacagggc ctcgggcctn 240
 ggtggggcacc ctgggatttn aatttccacg ggcacaaatgc ggtgcganc cctcaccacc 300
 nattaggaaat agtgggtntta ccnccnccg ttggcncact cccntggaa accactntc 360
 ggggctccgg catctggtct taaaccttgc aaacnctggg gccctctttt tggttantnt 420
 ncngccacaa atcatnactc agactggcnc gggctggccc caaaaaaanc ccccaaaacc 480
 gmnccatgtc tttnccgggt tgctgcnatn tncatcaact cccgggcnca ncaggncac 540
 ccaaaagttc ttgngggccn caaaaaaant ccggggggnc ccagtttcaa caaagtcac 600
 ccccttggcc cccaaatcct cccccngnt nctgggtttg ggaaccacag cctctnnctt 660
 tggnggcaa gntggntccc ccttcgggcc ccgggtggcc ccmnctctaa ngaaaaacnc 720
 ntctnnhca ccatcccccc nngnnaecgnc tancangna tcccttttt tanaaacggg 780
 cccccnng 799

<210> 33
 <211> 793
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(793)
 <223> n = A,T,C or G

```

<400> 33
gacagaaacat gttggatggt ggagcacctt tctatacgac ttacaggaca gcagatgggg 60
aattcatggc tgttggagca atanaacccc agttctacga gctgtcgtac aaaggacttg 120
gactaaagt tgatgaactt cccaatcaga tgagcatgga tgattggcca gaatatgaana 180
agaagtgtgc agatgtattt gcaagaaga cgaaggcaga gtgtgtgcaa atctttgacg 240
gcacagatgc ctgtgtgact cgtgttctga cttttgagga gtttgttcat catgatcaca 300
acaaagaaacg gggctcgttt atcaccantg aggagcagga cgtgagccccc cgccctgcac 360
ctctcgtggt aaacacccca gccatccctt ctttcaaaag ggatccacta cttctagagc 420
gmgngccacc gcggtggagc tccagctttt gttcccttta gtgagggtta attgccgctg 480
tgccgtaatc atgtgcatan ctgtttccctg ttgtaaattg ttatccgctc acaattccac 540
acaacatacg ancccggaagc atnaaatattt aaagcctggm ggtngcctaa tgantgaact 600
nactcacatt aattgctttt gcgctcactg cccgctttcc agtccggaaa acctgtcctt 660
gccagctgcc nttaatgaat cnggccacccc cccggggaaa aggcngtttg cttnttgggg 720
cgcncttccc gctttctcgc ttcctgaant ccttcccccc ggtctttcgg cttgcggcna 780
acggtatcna cct 793

```

```

<210> 34
<211> 756
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(756)
<223> n = A, T, C or G

```

```

<400> 34
gccgcgaccg gcatgtacga gcaactcaag ggcgagtgga accgtaaaag ccccaatctt 60
ancaagtgcg gggaanagct gggtcgactc aaagctagttc ttctggagct caactctcttg 120
ccaaaccacag ggaccaagct gaccaaaacag cagctaattc tggcccgcta caactcggag 180
atcgggggccc aatggagcat cctacgcaan gacatccctc ccttcgagcg ctacatggcc 240
cagctcaaat gctactactt tgattacaan gagcagctcc ccgagtcagc ctatatgcac 300
cagctcttgg gctctcaact cctcttccctg ctgtcccaga accgggtggc tgantnccac 360
acgganttgg ancggctgcc tgcccanga catacanacc aatgtctaca tcnaccacca 420
gtgtcctgga gcaatactga tgganggcag ctaccncaaa gntntctcgg ccnagggtaa 480
catcccgcgc cgagagctac accttcttca ttgacatcct gctcgacact atcagggtatg 540
aaaaatcgng ggttgcctca gaaaggctnc aanaaatccc ttttctctga agggcccccgg 600
atnctnagt nctagaatcg gcccgccatc gcggtgganc ctccaaacctt tcttntccct 660
ttactgaggg ttattgcgcg ccttggcgt tatcatggtc acnccngbth cctgtgttga 720
aattnttaac ccccacaat tccacgcna catting 756

```

```

<210> 35
<211> 834
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(834)
<223> n = A, T, C or G

```

```

<400> 35
ggggatctct anatonacct gnatgcatgg ttgtcgggtg ggtcgctgtc gatgaanatg 60
aacaggatct tgcccttgaa gctctcggct gctgtnttta agttgctcag tctgcgctca 120
tagtcagaca cnetcttggg caaaaaaan caggatntga gcttggattt cactcccaat 180
aatcttcngg gctgtctcgt cgttgaaact gatgacnang gcagctgtgt tgtgtntgat 240
aaantccanc angttctcct ttgtgacctc ccttcaaaag ttgttcgggc cttcatcaaa 300
ctctctnaan angannanc canctttgtc gagctggnat ttgganaaca cgtcactggt 360

```

```

ggaaactgat cccaaatggt atgtcatcca tggcctctgc tgcctgcaaa aaacttgctt 420
ggcncaaatc cgactccccc tecttgaag aagcncatca cacccccctc cctggactcc 480
nncaangact ctncgcgtnc cccntccnng cagggttggt ggcannccgg gcccntgcgc 540
ttcttcagcc agttcaacnat ntcatcagc cctctcgcca gctgtntat tctctggggg 600
ggaanccgtc tctcccttcc tgaannaact ttgaccgtng gaatagccgc gcntcnccnt 660
acntnctggg ccgggttcaa antccctcen ttgncmntcn cctcgggccca tctcggaatt 720
nccnaacttt ttccctcccc cnccccncgg ngtttgnttt ttcatnggg ccccaactet 780
gctnttgccc antccctgg ggcctnttan cnccccctnt ggtcccntng gccc 834

```

```

<210> 36
<211> 814
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(814)
<223> n = A,T,C or G

```

```

<400> 36
cggncgcttt cngcgcgcgc cccgtttcca tgacnaaggc tcccttcang ttaatacnnn 60
cctagnaaac attaatgggt tgctctacta atacatcata cnaaccagta agcctgccca 120
naacgccaac tcaggccatt cctaccaaag gaagaaaggc tggctctccc accocctgta 180
ggaaaggcct gcttgtgaag acaccacaaat nccgctgaat ctnaagctct gtgttttact 240
aatggaaaaa aaaaaataac aanaggtttt gtctctatgg ctgccaccgg cagcctggca 300
ctaaaaacnc ccagcgctca cttctgcttg ganaaatatt ctttgccttt ttggacatca 360
ggcttgatgg tatacctgcc acntttccac ccagctgggg ncccttcccc catntttgtc 420
antganctgg aaggcctgaa ncttagtctc caaaagtctc ngcccacaag accggccacc 480
aggggagntc ntttncagtg gatctgccaa anantaccn tatcatcnnt gaataaaaaa 540
gccctgaaac ganatgcttc cncanccttt taagacccat aatcctngaa ccattggctgc 600
cttccggctc gatccnaaag gaatgttctt gggtcocant cctcctttg ttncctacct 660
tgtnttggac ccntgctngn atnaccnaan tganatcccc ngaagcacc tnccectggc 720
atttganttt cntaatttct ctgccctacn nctgaaagca cnattccctn ggcncnnaan 780
gngaactca agaaggtctn ngaaaaacca cncn 814

```

```

<210> 37
<211> 760
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(760)
<223> n = A,T,C or G

```

```

<400> 37
gcattgctgt cttctctaaa gttgttcttg ttgccataac aaccaccata ggtaaaggcg 60
gcgcagtggt cgctgaaggg gttgtagtac cagcggggga tgctctcctt gcagagtctt 120
gtgtctggca gctccacgca atgcaccttg tcactgggga aatggatgct cctggagctt 180
tcnaannccac tegtgtattt ttcacangca gccctctccg aagcntccgg gcagtggggg 240
gtgtgctgac actccactaa actgtcgatn cancacgcca ttgctgcagc ggaactgggt 300
gggctgcagc gtgccagaac acactggatn ggcctttcca tggaaaggcc ttgggggaaat 360
cncctnanc ccaactgcct ctcaaggccc accctgcaca ccccgacagg ctagaatgc 420
actctcttcc ccaaggtag ttgttcttgg tgcccaagca nccctcanca aacccaaanc 480
ttgcaaaatc tgctccgtgg gggctatnnn taaccanggtt ggggaaanaa acccgcgngn 540
gancnccttt gtttgaatgc naaggnaata atcctcctgt cttgcttggg tgggaanagca 600
caattgaaat gttacnttg gcccgngtcc cncntgggtg gcttgaaact aatcaccgtc 660
actgaaaaa ggtangtgcc tctcttgaat tcccaaannt cccctngntt tgggntnttt 720

```


ctctctctncc ctaaaaatcg tnttcccccc centangggcg

760

<210> 38

<211> 724

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)... (724)

<223> n = A,T,C or G

<400> 38

tttttttttt	tttttttttt	tttttttttt	tttttaaaaa	ccccctccat	tgaatgaaaa	60
cttcnnaaat	tggtccaaccc	cttcnnccaa	atnnccattt	cggggggggg	gttccaaccc	120
caaatatatt	ttgggattta	aattaaatnt	tnattngggg	aanaanccaa	atgtnaagaa	180
aatttaaccc	attatnaact	taaatncctn	gaaacccntg	gnttccaaaa	atttttaacc	240
cttaaatccc	tccgaaattg	ntaanggaaa	accaaattcn	cctaaggctn	tttgaaggtt	300
ngatttaaac	ccccttnant	tntttnacc	cnngnctnaa	ntatttngnt	tccggtgttt	360
tccntntaan	cntnggtaac	tcccgntaat	gaannnccct	aanccaatta	aaccgaattt	420
tttttgaatt	ggaaattccn	ngggaattna	cgggggtttt	tcccntttgg	gggccatncc	480
cccnccttgc	gggtttgggn	ntaggttgaa	tttttnnang	ncccaaaaaa	nccccaanaa	540
aaaaaaactc	caagnnttaa	ttngaantnc	ccccttccca	ggccttttgg	gaaaggnngg	600
ttntnggggg	ccngggantt	cnttcccccn	ttncncccc	ccccccnggt	aaanggttat	660
ngnntttggg	ttttgggcc	cttnanggac	cttcgggatn	gaaattaaat	ccccggngcg	720
gccg						724

<210> 39

<211> 751

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)... (751)

<223> n = A,T,C or G

<400> 39

tttttttttt	tttttttttt	ctcacattta	attttttatt	tgattttttt	taatgctgca	60
caacacaata	tttatttcac	ttgtttcttt	tattttcaatt	tatttgtttg	ctgctgtgct	120
tttattttatt	tttactgaaa	gtgagaggga	acttttgggg	ccctttttcc	ttttttctga	180
ggcgcgcctta	agctttctaa	atttggaaca	tctaagcaag	ctgaanggaa	aaggggggtt	240
cgcataaatca	ctcgggggaa	nggaaaaggtt	gctttgttaa	tcatgcctta	tggtgggtga	300
ttaactgctt	gtacaattac	ntttcacttt	taatttaattg	tgctnaangc	tttaattana	360
cttggggggtt	ccctccccan	accaacccon	ctgacaaaaa	gtgccngccc	tcaaatnatg	420
tcccgccnnt	cnttgaacaa	cacngcmgaa	ngttctcatt	ntcccccncc	caggtnaaaa	480
tgaagggttta	ccatntttaa	cncacactcc	acntggcmnn	gcctgaatcc	tcnaaaancc	540
ccctcaancn	aattncctng	ccccgggtcnc	gcntnngtcc	cncccgggct	ccgggaantn	600
caccoccnca	anncnntnnc	naacnaaatt	ccgaaaaaat	tcccnntcnc	tcaattcccc	660
cnnagactnt	ctcnnncnan	cncaattttc	ttttnttcac	gaacnccngnc	cnnaaaatgn	720
nnnnnccctc	cncntngtcn	naatenccan	c			751

<210> 40

<211> 753

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature
 <222> (1)...(753)
 <223> n = A,T,C or G

<400> 40
 gtggtatttt ctgtaagatc aggtgttctt ccttcgtagg tttagaggaa acaccctcat 60
 agatgaaaac ccccccgaga cagcagcact gcaactgcca agcagccggg gtaggagggg 120
 cgccctatgc acagctgggc ccttgagaca gcagggcttc gatgtcaggg tcgatgtcaa 180
 tggctctgaa gcggcgctgt tactctgcgt ggggcacacc gtcagggccc accaggaact 240
 tctcaaaagt ccaggcaacn tcgttgcgac acacgggaga ccaggtgatn agcttggggg 300
 cggtcataan cgcggtggcg tcgtcgctgg gagctggcag ggcctcccgc aggaaggcna 360
 ataaaaagtg cgcgcccgca cgttccanct cgcacttctc naanaccatg angttgggct 420
 cnaaccaccc accannccgg acttccctga nggaattccc aaatctcttc gntcctgggc 480
 ttctnctgat gccctanctg gttgcccnng atgccaanca nccccaancc cgggggtcct 540
 aaanacccn cctcctcctt tcctctgggt tnttntcccc ggaacctggt tcctctcaag 600
 ggancccata tctcnaccan tactcacent nccccccent gnnaccanc cttctannng 660
 ttccncccg nccctctggc cntcaaanan gcttnacma cctgggtctg ccttcccccc 720
 taccctatct gnaccnccn ttgtctcan tnt 753

<210> 41
 <211> 341
 <212> DNA
 <213> Homo sapien

<400> 41
 actatatcca tcacaacaga catgcttcat cccatagact tcttgacata gcttcaaatg 60
 agtgaaccca tctctgattt atatacatat atgttctcag tattttggga gcctttccac 120
 ttctttaaac ctgttctcatt atgaacactg aaaataggaa ttgtgaaga gttaaaaagt 180
 tatagctgtg ttacgtagta agtttttgaa gtctacattc aatccagaca cttagttagg 240
 tgttaaactg tgatttttaa aaaatatcat ttgagaatat tcttcagag gtattttcat 300
 ttttactttt tgattaatgt tgttttatat attagggtag t 341

<210> 42
 <211> 101
 <212> DNA
 <213> Homo sapien

<400> 42
 acttactgaa tttagttctg tgctcttctt tatttagtgt tgtatcataa atacctttgat 60
 gtttcaacaa ttctaataaa ataattttca gtggcttcat a 101

<210> 43
 <211> 305
 <212> DNA
 <213> Homo sapien

<400> 43
 acatctttgt tacagtctaa gatgtgttct taaatcacca ttcttctctg gtctccacc 60
 tccagggtgg tctcacactg taattagagc tattgaggag tctttacagc aaattaagat 120
 tcagatgcct tgctaagctc agagtctctg agttatgttt cagaaagtct aagaaaccca 180
 cctcttgaga ggtcagtaaa gaggacttaa tatttcatat ctacaaaatg accacaggat 240
 tggatacaga acgagagtta tctggataa ctacagagctg agtacctgcc cgggggcccg 300
 toga 305

<210> 44
 <211> 852
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(852)
 <223> n = A,T,C or G

<400> 44

acataaatat	cagagaaaag	tagtctttga	aatatttacg	tccaggagtt	ctttgtttct	60
gattattttg	tgtgtgtttt	ggtttgtgtc	caaagtattg	gcagcttcag	ttttcatttt	120
ctctccatcc	tcgggcattc	ttcccaaatt	tatataccag	tctctgtcca	tccacacgct	180
ccagaaattc	tctttttag	taatatctca	tagctcggtc	gagcttttca	taggtcatgc	240
tgctgttgtt	cttcttttta	ccccatagct	gagccactgc	ctctgatttc	aagaaacctga	300
agacgccttc	agatoggtct	tcccatttta	ttaatcctgg	gttctgtctc	gggttcaaga	360
ggatgtcgcg	gatgaattcc	cataagtgag	tcctctcggg	gttggtgttt	ttggtgtgac	420
acttggcagg	gggtgtctgc	tcctttttca	tatcagggtg	ctctgcaaca	ggaaggtgac	480
tggtgttgtt	catggagatc	tgagcccgcc	agaaagtttt	gctgtccaac	aaatctactg	540
tgctaccata	gttgggtgtc	tataaatagt	tctngtcttt	ccaggtgttc	atgatggaag	600
gctcagtttg	ttcagtcctg	acaatgacat	tgtgtgtgga	ctggaacagg	tcactactgc	660
actggcggtt	ccaattcaga	tgtctgcaagt	tgctgtagag	gagntgcccc	gccgtccctg	720
ccgcccgggt	gaactcctgc	aaactcatgc	tgcaaaaggtg	ctcgccgttg	atgtcgaaat	780
cntggaaaag	gatacaattg	gcattccagct	ggttggtgtc	caggaggtga	tggagccact	840
ccacacctgt	gt					852

<210> 45
 <211> 234
 <212> DNA
 <213> Homo sapien

<400> 45

acaacagacc	cttgctcgct	aacgacctca	tgtctcatca	gttgagcaga	tccgtgtcgg	60
agtctgacac	catccggagc	atcagcattg	cttcgcagtg	ccctaccgcg	gggaacctctt	120
gcctctgttc	tggtctgggt	ctgctggcga	acggcagaat	gcctaccgtg	ctgcagtgcg	180
tgaacgtgtc	ggtgtgtctc	gaggaggtct	gcagtaagct	ctatgacccg	ctgt	234

<210> 46
 <211> 590
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(590)
 <223> n = A,T,C or G

<400> 46

actttttatt	taaatgttta	taaggcagat	ctatgagaat	gatagaaaaa	atggtgtgta	60
atttgatagc	aatatatttg	agattacaga	gttttagtaa	ttaccaatta	cacagttaaa	120
aagaagataa	tatatccaaa	gcanaatacaa	aatatcta	gaagatcaca	ggcaggaaaa	180
tgantataac	taattgcaca	tggaataatca	attttaatgt	gaattgcaca	ttaatccttta	240
aaagctttca	aaanaanaaa	ttaattgcagt	ctanttaatt	caaacaggtg	taaatgggtat	300
caggataaana	aactgaaggg	canaaaagaat	taattttcac	tccatgtaac	ncaccanatt	360
ttacaatggc	ttaaatgcana	ggaaaaagca	gtggaagtag	ggaagtantc	aaggtctttc	420
tggtctctaa	tctgcctaac	tctttgggtg	tggtcttgat	cctctggaga	cagctgccac	480
ggctcctgtt	atatccacaa	tcocagcagc	aagatgaagg	gatgaaaaag	gacacatgct	540
gccttctctt	gaggagactt	catctcactg	gccacaactc	agtcacatgt		590

<210> 47
 <211> 774

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(774)

<223> n = A,T,C or G

<400> 47

acaagggggc	ataatgaag	agtggggana	gattttaaag	aaggaaaaa	aacgaggccc	60.
tgaacagaa	tttccctgnac	aacggggcct	caaaaataatt	ttcttgggga	ggttcaagac	120
gcttcactgc	tgaaacctta	aatggatgtg	ggacanaatt	ttctgtaatg	accctgaggg	180
cattacagac	gggactctgg	gaggaaggat	aaacagaaag	gggacaaagg	ctaatcccaa	240
aacatcaaa	aaaggaaggt	ggcgtcatat	ctcccagcct	acacagtctt	ccagggcctt	300
cctcatccct	ggaggacgac	agtggaggaa	caactgacca	tgtccccagg	ctcctgtgtg	360
ctggctcctg	gtcttcagcc	cccagctctg	gaagcccccc	ctctgctgat	cctgcgtggc	420
ccacactcct	tgaacacaca	tccccaggtt	atattcctgg	acatggctga	acctcctatt	480
cctacttcgg	agatgccttg	ctccctgcag	cctgtcaaaa	tcccaactac	cctccaaaacc	540
acggcatggg	aaqcctttct	gacttgccctg	attactccag	catcttggaa	caatccctga	600
ttccccactc	cttagaggga	agatagggtg	gttaagagta	gggctggacc	acttgagacc	660
agggctgctg	cttcaaattn	tggtctcattt	acgagctatg	ggaccttggg	caagtnatct	720
tcacttctat	gggcntcatt	ttgttctacc	tgcaaaatgg	gggataataa	tagt	774

<210> 48

<211> 124

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(124)

<223> n = A,T,C or G

<400> 48

canaaattga	aattttataa	aaaggcattt	ttctcttata	tccataaaat	gatataattt	60
ttgcaantat	anaaatgtgt	cataaattat	aatgttcctt	aattacagct	caacgcaact	120
tggt						124

<210> 49

<211> 147

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(147)

<223> n = A,T,C or G

<400> 49

gccgatgcta	ctattttatt	gcaggagggtg	gggggtgttt	tattattctc	tcaacagctt	60
tggtgctaca	ggtggtgtct	gactgcattna	aaaanttttt	tacgggtgat	tgcaaaaatt	120
ttagggcacc	catatcccaa	gcantgt				147

<210> 50

<211> 107

<212> DNA

<213> Homo sapien

<400> 50
 acattaaatt aataaaagga ctgttggggt tctgctaaaa cacatggctt gatatatgtg 60
 atggttttag gttaggagga gttaggcata tgttttggga gaggggt 107

<210> 51
 <211> 204
 <212> DNA
 <213> Homo sapien

<400> 51
 gtcttaggaa gtctagggga cacacgactc tggggtcacg gggccgacac acttgcacgg 60
 cggaaggaa aggcagagaa gtgacaccgt cagggggaaa tgacagaaag gaaaaacaa 120
 gccttgcaag gtccagaaag ggactcaggg cttccaccac agccctgcc cacttgccca 180
 cctccctttt gggaccagca atgt 204

<210> 52
 <211> 491
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature /
 <222> (1)...(491)
 <223> n = A,T,C or G

<400> 52
 acaaagataa catttatctt ataacaaaaa ttgatagtt ttaaaggta gtattgtga 60
 gggatttttc caaaagacta aagagataac tcaggtaaaa agttagaaat gtataaaaca 120
 ccaacagaca ggttttataa aaacaacata ttacaaaatt agacaatcat ccttaaaaaa 180
 aaaactcttt gtatcaattt cttttgttca aaatgactga cttaatatt tttaaatatt 240
 tcanaaacac ttctcaaaaa attttcaana tggtagcttt canatgtnc ctcagtcoca 300
 atgttgctca gataaataaa tctcgtgaga acttaccacc caccacaagc ttctggggc 360
 atgcaacagt gtcttttctt tcttttttct tttttttt ttacaggcac agaaactcat 420
 caattttatt tggataacaa aggggtctcca aattatatg aaaaataaat ccaagttaat 480
 atcactcttg t 491

<210> 53
 <211> 484
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(484)
 <223> n = A,T,C or G

<400> 53
 acataattta gcagggtcaa ttaccataag atgetattta ttaanaggtn tatgatctga 60
 gtatttaacag ttctgaagt ttggtatttt tatgcagcat ttcttttttg ctttgataac 120
 actacagaac ccttaaggac actgaaaatt agtaagtaaa gtccagaaac attagctgct 180
 caatcaaatc tctacataac actatagtaa ttaaaacggt aaaaaaaagt gttgaaatct 240
 gcactagtat anaccgctcc tgtcaggata anactgcttt ggaacagaaa gggaaaaanc 300
 agctttgant tcttttgctg tgatangagg aaaggctgaa ttaccttggc gectctccct 360
 taatgttggc aggtcnggta aatnccaaaa catattccaa ctcaacactt cttttccnec 420
 tanccttgant ctgtgtatcc caggancagg cggatggaat gggccagccc ncggatgttc 480
 cant 484

<210> 54

<211> 151
 <212> DNA
 <213> Homo sapien

<400> 54
 actaaacctc gtgctttgtga actccatata gaaaacgggtg ccattccctga acacggctgg 60
 ccactgggta tactgtctgac aaccgcaaca acaaaaaacac aaatccttgg cactggctag 120
 tctatgtcct ctcaagtgcc tttttgtttg t 151

<210> 55
 <211> 91
 <212> DNA
 <213> Homo sapien

<400> 55
 acctggcttg tctccgggtg gttcccggtg cccccacggg tccccagaac ggacatttc 60
 gccctccagt ggatactoga gccaaagtgg t 91

<210> 56
 <211> 133
 <212> DNA
 <213> Homo sapien

<400> 56
 ggcggatgtg cgttggttat atacaaatat gtcattttat gtaagggtact tgagtatact 60
 tggatttttg gtatctgtgg gttgggggga cggttccaggga accaataccc catggatacc 120
 aagggaacac tgt 133

<210> 57
 <211> 147
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(147)
 <223> n = A,T,C or G

<400> 57
 actctggaga acctgagccg ctgctccgcc tctgggtatga ggtgatgcan gcngtggcgc 60
 gactgggagc tgagcccttc cctttgcgcc tgcctcagag gattgttgcc gacntgcana 120
 tctcantggg ctggatncaat gcagggt 147

<210> 58
 <211> 198
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(198)
 <223> n = A,T,C or G

<400> 58
 acaggagatat aggttttnaag ttattgtnat tgtaaaatc attgaatttt ctgtatactc 60
 tgattacata catttatcct ttaaaaaaga tgtaaatctt aatttttatg ccactatatta 120
 atttaccat gagttaccct gtaaatgaga agtcatgata gcaactgaatt ttaactagtt 180
 ttgacttcta agtttggg 198

<210> 59
 <211> 330
 <212> DNA
 <213> Homo sapien

<400> 59
 acaacaaatg ggttgtagg aagtcttatac agcaaaactg gtgatggcta ctgaaaagat 60
 ccattgaaaa ttatcattaa tgattttaaa tgacaagtta tcaaaaactc actcaatttt 120
 cacctgtgct agcttgctaa aatgggagtt aactctagag caaatatagt atctcttgaa 180
 tacagtcaat aatgacaaa gccagggcct acaggtggtt tccagacttt ccagaccag 240
 cagaaggaat ctattttatc acatggatct ccgtctgtgc tcaaaatacc taatgatatt 300
 tttgtcttt attggacttc tttgaagagt 330

<210> 60
 <211> 175
 <212> DNA
 <213> Homo sapien

<400> 60
 accgtgggtg cctctacatc tcctgacggc tccttcacca acatctggtt ctacttcggc 60
 gtcgtgggtc cctctcctct catctcctac cagctggtgc tgcctatcga ctttgccgac 120
 tcttggaacc agcgggtggt gggcaaggcc gaggagtgcg attcccggtc ctggt 175

<210> 61
 <211> 154
 <212> DNA
 <213> Homo sapien

<400> 61
 accccacttt tcctctctgt agcagtcttg acttctcact gctacatgat gaggggtgagt 60
 gggtgtgtgt ctccaacagt atctctccct ttcgggatct gctgagccgg acagcagtg 120
 tggactgcac agccccgggg ctccacattg ctgt 154

<210> 62
 <211> 30
 <212> DNA
 <213> Homo sapien

<400> 62
 cgctcggacc ctatagttag tcgtattaga 30

<210> 63
 <211> 89
 <212> DNA
 <213> Homo sapien

<400> 63
 acaagtcatc tcagcaccct ttgctcttca aaactgacca tcttttatat ttaatgcttc 60
 ctgtatgaat aaaaatgggt atgtcaagt 89

<210> 64
 <211> 97
 <212> DNA
 <213> Homo sapien

<400> 64
 accggagtaa ctgagtcggg acgctgaatc tgaatccacc aataaataaa ggttctgcag 60

aatcagtgca tccaggattg gtccttgat ctgggg

97

<210> 65

<211> 377

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(377)

<223> n = A,T,C or G

<400> 65

acaacaanaa ntcccttctt taggcactg atggaacct ggaacccct tttgatggca	60
gcatggcgctc ctaggccttg acacagcggc tggggtttg gctntccaa accgcacacc	120
ccaaccctgg tctacccaca nttctggcta tgggctgtct ctgccactga acatcagggt	180
tcggtcataa natgaaatcc caanggggac agaggtcagt agaggaagct caatgagaaa	240
ggtgctgttt gctcagccag aaaaacagctg cctggcattc gccgtgaac tatgaaccog	300
tgggggtgaa ctaccccan gaggaatcat gctggggcga tgcaangtg ccaacaggag	360
ggcgggagg agcatgt	377

<210> 66

<211> 305

<212> DNA

<213> Homo sapien

<400> 66

acgcctttcc ctccagaattc agggaagaga ctgtgcctg ccttctccg ttgttcgctg	60
agaaccctgg tgcccttcc caccatatcc accctcgctc catctttgaa ctcaaacacg	120
aggaaactaac tgccacctgg tctctctccc agtccccagt tcacctcca tccctcactc	180
tcctccactc taagggatat caacactgcc cagcacaggg gccctgaatt tatgtgtgtt	240
ttatatattt tttaataaga tgcaatttat gtcatttttt aataaagtct gaagaattac	300
tggtt	305

<210> 67

<211> 385

<212> DNA

<213> Homo sapien

<400> 67

actacacaca ctccacttgc ccttgtgaga cactttgtcc cagcacttta ggaatgctga	60
ggtcggacca gccactctc atgtgcaaga ttgccagca gacatcagg ctgagagtcc	120
cccttttaaa aaaggggact tgcttaaaaa agaagtcctag ccaagattgt gttagagcagc	180
tgtgctgtgc tggagattca cttttgagag agttctctcc tgagacctga tctttagagg	240
ctggcgagtc ttgcacatga gatggggctg gtctgatctc agcactcctt agtctgcttg	300
cctctcccag ggccccagcc tggccacacc tgcttacagg gcaactctcag atgcccatac	360
catagtttct gtgtagtgg accgt	385

<210> 68

<211> 73

<212> DNA

<213> Homo sapien

<400> 68

acttaaccag atatatattt accccagatg gggtatattc ttgtaaaaa tgaataaaa	60
gtttttttaa tgg	73

<210> 69

<211> 536
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(536)
 <223> n = A,T,C or G

<400> 69
 actagtcacg tgtggtggaa ttccattgtg ttgggggctc tcaccctcct ctctgcagc 60
 tccagctttg tgctctgcct ctgaggagac catggcccag catctgagta cctgctgtct 120
 cctgtctggc accctagctg tggccctggc ctggagcccc aaggaggagg ataggataat 180
 cccgggtggc atctataacg cagacctcaa tgaatgagtg gtacagcgtg cctctcaact 240
 cgccatcagc gagtataaca aggccaccaa agatgactac tacagacgtc cgctgcgggt 300
 actaagagcc agggcaacaga ccgttggggg ggtgaattac ttcttcgacg tagaggtggg 360
 ccgaaccata tgtaccaagt cccagcccaa cttggacacc tgtgccttcc atgaacagcc 420
 agaactgcag aagaacacgt tgtgctcttt cgagatctac gaagttccct ggggagaaca 480
 gaangtcctt ggggtgaatc cagggtgtcaa gaaatcctan ggtatctgtg ccagcg 536

<210> 70
 <211> 477
 <212> DNA
 <213> Homo sapien

<400> 70
 atgaccoccta acagggggccc tctcagccct cctaagtacc tccggcctag ccatgtgatt 60
 tcacttcacac tccataacgc tcctcatact aggcctacta accaacacac taacctata 120
 ccaatgatgg cgcgatgtaa cagcagaaag cacataccaa ggccaccaca caccacctgt 180
 ccaaaaaggc cttgcatacg ggataatcct atttattacc tcagaagtgt ttttcttcgc 240
 agggattttt ctgagccttt taccactcca gcttagcccc taccocccaa ctaggagggc 300
 actggccccc aacaggcatc acccgctaa atcccctaga agtcccact ctaaacacat 360
 ccgtattact cgcacagga gtatcaatca cctgagctca ccatagtcta atagaaaaca 420
 accgaaacca aattattcaa agcactgctt attacaattt tactgggtct ctatttt 477

<210> 71
 <211> 533
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(533)
 <223> n = A,T,C or G

<400> 71
 agagctatag gtacagtgtg atctcagctt tgcaaacaca ttttctacat agatagtact 60
 aggtattaat agatagttaa agaaagaat cacaccatta ataatggtaa gattgggtta 120
 ttgtatttta gtggtatttt tggcaccctt atatatgttt tccaaacttt cagcagtgat 180
 attattttca taacttaaaa agtgagtgtt aaaaagaaaa tctccagcaa gcattctcatt 240
 taataaaggc ttgtgcatct ttataaatac agcaatatgt gactttttaa aaaaagctgtc 300
 aaatagggtg gacctacta ataattatta gaaatacatt taaaaacatc gagtacctca 360
 agtcagtttg ccttgaaaaa tatcaaatat aactcttaga gaaatgtaca taaaagaatg 420
 cttcgtaatt ttggagtang aggttccttc ctcaattttg tatttttaaa aagtaactgg 480
 taaaaaaa aattcacacac agtatataag gctgtaaaat gaagaattct gcc 533

<210> 72
 <211> 511

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(511)
<223> n = A,T,C or G

```

<400> 72
tattacggaa aaacacacca cataattcaa ctancaaaga anactgcttc agggcgtgta      60
aaatgaaagg ttccaggga gttatctgat taaagaacac taaaagaggg acaaggctaa      120
aagccgcagg atgtctacac tatancaggc gctatttggg ttggctggag gagcttgga      180
aaacatggan agattggtgc tgganacgc cgtggctatt cctcattgtt attacanagt      240
gaggttctct gtgtgccacc tggtttgaaa accgttctnc aataatgata gaatagtaca      300
cacatgagaa ctgaaatggc ccaaacccag aaagaaagcc caactagatc ctccagaanac      360
gcttctaggg acaataaccg atgaagaaaa gatggcctcc ttgtgcccc gtctgttatg      420
atttctctcc attgcagcna naaacccgtt cttctaagca aacncagggt atgatggcna      480
aaatacacc cctctgaag nacnggagg a                                     511

```

<210> 73
<211> 499
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(499)
<223> n = A,T,C or G

```

<400> 73
cagtgcagc actggtgcca gtaccagtac caataacagt gccagtgcc gtgccagcac      60
cagtgggtgc ttacgtgctg gtgccagcct gaccgccact ctcacatttg ggctcttcgc      120
tggecttggt ggagctggtg ccagcaccag tggcagctct ggtgcctgtg gtttctccta      180
caagtgagat tttagatatt gttaatcctg ccagctcttc tcttcaagcc aggggtgcac      240
ctcagaacc tactcaacac agcactctag gcagccacta tcaatcaatt gaagttgaca      300
ctctgcatta aatctatttg ccatttttga aaaaaaaaaa aaaaaaagg cgccgctcg      360
antctagagg gccggtttaa acccgctgat cagcctcgac tgtgcctct anttgcagc      420
catctgtgtt ttgccctccc ccgntgect tcttgaccc tggaaagtgc cactcccact      480
gtcctttcct aantaaat                                     499

```

<210> 74
<211> 537
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(537)
<223> n = A,T,C or G

```

<400> 74
tttcatagga gaacacactg aggagatact tgaagaattt ggattcagcc gcgaagagat      60
ttatcagctt aactcagata aaatcattga aagtaataag gtaaaagcta gtctcttaact      120
tccaggccca cggctcaagt gaatttgaat actgcattta cagtgtagag taacacataa      180
cattgtatgc atggaacat ggaggaaacag tattacagtg tctaccact ctaatcaaga      240
aaagaattac agactctgat tctacagtga tgattgaatt ctaaaaatgg taatcattag      300
ggcttttgat ttataanaact ttgggtactt atactaaatt atggtagtta tactgccttc      360
cagtttgctt gatataattg ttgatattaa gattcttgac ttatatttg aatgggttct      420

```

```
actgaaaaan gaatgatata ttcttgaaga catcgatata catttattta cactcttcat 480
tctacaatgt agaaaatgaa ggaaatgcc caaattgtat ggtgataaaa gtcccg 537
```

```
<210> 75
<211> 467
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(467)
<223> n = A,T,C or G
```

```
<400> 75
caaanacaat tgttcaaaag atgcaaatga tacactactg ctgcagctca caaacacctc 60
tgcataattac acgtacacctc tctctgctcct caagttagtgt ggtctatctt gccatcatca 120
cctgctgtct gcttagaaga acggtcttct gctgcaangg agagaaatca taacagacgg 180
tggcacaagg aggccatctt ttctctcatcg gttattgtcc ctgaagcggt cttctgagga 240
tctagtgggg ctttctttct gggtttgggc catttcantt ctcatgtgtg tactattcta 300
tcattattgt ataacggttt tcaaacnngt gggcacnagc agaacctcac tctgtaataa 360
caatgaggaa tagccaaggt gatctccagc accaaatctc tccatgttat tccagagctc 420
ctccagccaa cccaaatagc cgctgctatn gtgtagaaca tccctgn 467
```

```
<210> 76
<211> 400
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G
```

```
<400> 76
aagctgacag cattcgggcc gagatgtctc gctccgtggc cttagctgtg ctgcgctac 60
tctctctttc tggcctggag gctatccagc gtaactccaa gattcaggtt tactcacgtc 120
atccagcaga gaattgaaag tcaaatcttc tgaattgcta tgtgtctggg ttctatccat 180
ccgacattga agtgacatta ctgaagaatg gagagagaat tgaaaaagtg gagcattcac 240
actgtctttt cagcaaggac tggctcttct atctcttgta ctacactgaa ttcaacccca 300
ctgaaaaaga tgagtatgcc tgccgtgtga accatgtgac ttgtccacag cccaagatng 360
ttnagtggga tcganacatg taagcagcan catggggagt 400
```

```
<210> 77
<211> 248
<212> DNA
<213> Homo sapien
```

```
<400> 77
ctggaagtgc ttggtgtttc aagccctgc aggaagcaga atgcaccttc tgaggcacct 60
ccagctgccc cggcggggga tgcgaggctc ggagcaccct tgcccggctg tgattgctgc 120
caggcactgt tcactctcagc ttctctgtcc ctttgcctcc ggcaagcgct tctgtctgaa 180
gtcatalatc ggagcctgat gtcttaacga ataaaggctc catgctccac ccgaaaaaaa 240
aaaaaaaaa 248
```

```
<210> 78
<211> 201
<212> DNA
<213> Homo sapien
```

<400> 78
 actagtccag tgtgtggaa ttccattgtg ttgggcccaa cacaatggct accttaaca 60
 tcaccagac ccgcctgtc cgtgcccc cgtgctgtc aacgacgta tgatgcttac 120
 tctgtactc ggaactatt tttatgtaat taatgtatgc tttctgttt ataatgctt 180
 gattataaaa aaaaaaaaaa a 201

<210> 79
 <211> 552
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(552)
 <223> n = A,T,C or G

<400> 79
 tccttttgtt aggttttga gacaacccta gacctaaact ggtgcacaga cttctgaatg 60
 tttaggcagt gctagtaatt tctctgtaatt gattctgtta ttactttcct attctttatt 120
 cctctttctt ctgaagatta atgaagtga aaattgaggt ggataaatac aaaaaggtag 180
 tgtgatagta taagtatcta agtgcagatg aaagtgtgtt atatatatcc attcaaaatt 240
 atgcaagtga gtaattactc aggggttaact aaattacttt aatattgctgt tgaacctact 300
 ctgttctctg gctagaataa attataaaca ggactttgtt agtttgggaa gccaaattga 360
 taatatctta tgttctaaaa gttgggctat acataaanta tnaagaataa tggaaatttta 420
 ttccaggaaa tatgggggtc atttatgaat antaccggg anagaagttt tgantnaaac 480
 cngttttgtt taatacgtta atatgtcctn aatnaacaag gcntgacctt ttccaaaaa 540
 aaaaaaaaaa aa 552

<210> 80
 <211> 476
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(476)
 <223> n = A,T,C or G

<400> 80
 acagggattt gagatgctaa ggcgccagag atcgtttgat ccaaccctct tattttcaga 60
 ggggaaatgt gggcctagaa gttacagagc atctagctgg tgcgctggca cccctggcct 120
 cacacagact ccgagtagc tgggactaca ggcacacagt cactgaagca ggcctgtttt 180
 gcaattcacg ttgccacctc caacttaaac attcttcata tgtgatgtcc ttatgtaacta 240
 aggttaaaact tccccacca gaaaaggcaa cttagataaa atcttagagt accttcatac 300
 tcttctaagt cctcttcag cctcactttg agtcctcctt gggggttgat aggaantntc 360
 tcttggtttt ctcaataaaa tctctatcca tctcatgttt aatttggtag gcntaaaaat 420
 gctgaaaaaa ttaaaatggt ctggtttcnc tttaaaaaaa aaaaaaaaaa aaaaa 476

<210> 81
 <211> 232
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(232)
 <223> n = A,T,C or G

<400> 81
 ttttttttgg tatgcentcn ctgtgngntt attgttgcgt ccaccttgga ggagcccagt 60
 ttcttctgtta tcttttctttt ctggggggtc ttctgtggtc tgccctcca ttccagcct 120
 ctcatcccca tcttgcactt ttgttagggt tggaggcgt ttctgtgtag ccctcagag 180
 actcagtcag cgggaataag tcctagggtt ggggggtgtg gcaagccggt ct 232

<210> 82
 <211> 383
 <212> DNA
 <213> Homo sapien
 <220>
 <221> misc_feature
 <222> (1)...(383)
 <223> n = A,T,C or G

<400> 82
 aggggggagc agaagctaaa gccaaagccc aagaagagt gcaagtgccag cactggtgcc 60
 agtaccagta ccaataacat gccagtgcca gtgccagcac cagtgggtggc ttcaagtgtg 120
 gtgccagcct gaccgcact ctacatttg ggctcttcgc tggccttggg ggagctgggtg 180
 ccagcaccag tggcagctct ggtgctctgt gtttctccta caagtgtgat ttaagtatt 240
 gttatctctg ccagttcttc tcttcaagcc aggggtgcac ctccagaacc taactcaacac 300
 agcactctng gcagccacta tcaatcaatt gaagttgaca ctctgcatta aatctatttg 360
 ccatcttcaa aaaaaaaaaa aaa 383

<210> 83
 <211> 494
 <212> DNA
 <213> Homo sapien
 <220>
 <221> misc_feature
 <222> (1)...(494)
 <223> n = A,T,C or G

<400> 83
 accgaattgg gaccgtggc ttataagoga tcatgtcttc cagtattaac tcaacgagca 60
 gggagatcga gtctatagc tgaagaaatt tgaccogag ggacaacaga cctgctcagc 120
 ccactctgct cgtttctccc catagtacaa atactctcga caccgaatca ccatcaagaa 180
 acgcttcaag gtgctcatga ccagcaacc ggcctctgtc ctctgagggg ccttaaaactg 240
 atgtcttttc tgccacctgt taccctctcg agactccgta accaaactct tcggaactgtg 300
 agccctgatg cctttttgcc agccatactc ttggcctcc agtctctcgt ggcgattgat 360
 tatgcttggt tgaggcaatc atggtggcat caccatnaa gggaacacat ttganttttt 420
 tttncatat tttaaattac naccagaata nttcagaata aatgaattga aaaactctta 480
 aaaaaaaaaa aaaa 494

<210> 84
 <211> 380
 <212> DNA
 <213> Homo sapien
 <220>
 <221> misc_feature
 <222> (1)...(380)
 <223> n = A,T,C or G

<400> 84

gctggtagcc	tatggcgtgg	ccacgggagg	gctcctgagg	cacgggacag	tgaactccca	60
agtatcctgc	gcgcgctctt	ctaccgtccc	tacctgcaga	tcttcgggca	gattccccag	120
gaggacatgg	acgtggccct	catggagcac	agcaactgct	cgtcggagcc	cggtctctgt	180
gcacacccct	ctgggggcca	ggcgggcacc	tgctctcccc	agtatgccaa	gtggctgggtg	240
gtgctgctcc	tgcgtctctt	cctgctcgtg	gccaaacatc	tgctggtcac	ttgctcattg	300
ccatgttcag	ttacacattc	ggcgaagtac	agggcaacag	cnatctctac	tgggaaggcc	360
agcgttnccg	cctcatccgg					380

<210> 85

<211> 481

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(481)

<223> n = A,T,C or G

<400> 85

gagttagctc	ctccacaacc	ttgatgaggt	cgtctgcagt	ggcctctcgc	ttcataccgc	60
tnccatcgct	atactgtagg	tttgccacca	cctcctgcat	cttggggcgg	ctaataacca	120
ggaaactctc	aatcaagtca	ccgtcnaatn	aacctgtggc	tggttctgtc	ttccgctcgg	180
tgtagaaggga	tctccagaag	gagtgctcga	tcttccccac	acttttgatg	actttattga	240
gtcgaattct	catgtccagc	aggaggttgt	accagctctc	tgacagtgag	gtcaccagcc	300
ctatcatcgcc	nttgaacgtg	ccgaagaaca	ccgagccctg	tgtggggggg	gnagtctcac	360
ccagattctg	cattaccaga	nagccgtggc	aaaaganatt	gacaactcgc	ccaggnnngaa	420
aaagaacacc	tcttggaagt	gctngccgct	cctcgtccnt	tggtggnnngc	gcntnccctt	480
t						481

<210> 86

<211> 472

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(472)

<223> n = A,T,C or G

<400> 86

aaacatcttc	tgataaatgc	tggtgtaaat	cgatccgatn	ttgtctgctg	agaattcatt	60
acttggaaaa	gcaacttnaa	gcctggacac	tggtattaaa	attcacaata	tgcaacacctt	120
taaacagctgt	gtcaatctgc	tcctttactt	tgatcatacc	agctctggga	taagggtatg	180
ccctattcac	acctgttaaa	agggcgctaa	gcatttttga	ttcaacatct	ttttttttga	240
cacaagtcgc	aaaaaagcaa	aagtaaacag	ttnttaattt	gttagccaat	tcactttctt	300
catgggacag	agccatttga	tttaaaaagc	aaattgcata	atattgagct	ttgggagctg	360
atatntgagc	ggaagantag	cctttctact	tcaccagaca	caactccttt	catattggga	420
tgtnacnaa	agttatgtct	cttacagatg	ggatgctttt	gtggcaattc	tg	472

<210> 87

<211> 413

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(413)

<223> n = A,T,C or G

<400> 87
 agaaacaggt atctctnaaa acaacctctc atacctgttg gacctaat tgtgtgcgtg 60
 tgtgtgtgcg cgcataattat atagacaggc acatcttttt tacttttgta aaagcttatg 120
 cctcttttgt atctatatct gtgaaagttt taatgatctg ccaataatgct ttggggacct 180
 ttgtctcttg tgtaaattgt actagagaaa acacctatnt tatgagtcaa tctagttngt 240
 ttattctgac atgaaggaat ttctcagatn acaacactna caaacctccc cttgactagg 300
 ggggacaaag aaaagcnaaa ctgaacatna gaaacaatn cctggtgaga aattncataa 360
 acagaattg ggtngtatat tgaananng catcattnaa acgttttttt ttt 413

<210> 88
 <211> 448
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(448)
 <223> n = A,T,C or G

<400> 88
 cgcagcgggt cctctctatc tagctccagc ctctcgcttg ccccaactccc cgcgtccgcg 60
 gtccctagcnn accatggcgg gcgccctgcg cgccccgctg ctctcgcttg ccatctctggc 120
 cgtggccctg gccgtgagcg ccgcggcgcg ctccagctccc ggcaagcccg cgcgcctggt 180
 gggaggccca tggaccccgcg gtggaagaag aaggtgtgcg gcgtgcactg gactttgcgg 240
 tcggcnanta caacaaaccc gcaacnactt ttacnagcnn cgcgctgcag gttgtgcactg 300
 cccaanacaa ttgttactng gggtaanata ttcttggaag ttgaacctgg gccaaacnng 360
 tttaccagaa ccnagccaat tngaacaatt ncccctccat aacagccctt tttaaaaagg 420
 gaancantcc tgntcttttc caaatttt 448

<210> 89
 <211> 463
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(463)
 <223> n = A,T,C or G

<400> 89
 gaattttgtg cactggccac tgtgatggaa ccattgggcc aggatgcttt gagtttatca 60
 gtagtgattc tgccaaagtt ggtgttgtta catgagtagt taaaatgtca aaaaattgac 120
 agaggtctag gtctgcatac cagcagacag ttgttccgtg tattttgtag ccttgaagtt 180
 ctcaagtaca agttnnttct gatgcgaagt tctnattcca gtgttttagt cctttgcatc 240
 tttnatgttn agacttgcct ctntnaaatt gctttgtnt tctgcaggta ctatctgttg 300
 tttacacaaa tagaannact tctctgcttn gaanatttga atatcttaca tctnaaaatn 360
 aattctctcc ccatannaaa acccangccc ttggganaat ttgaaaaang gntccttcnn 420
 aattcnana anttcagntn tcatacaaa naacngganc ccc 463

<210> 90
 <211> 400
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(400)

<223> n = A,T,C or G

<400> 90

agggattgaa	ggtctntnt	actgtcggac	tgttcanca	ccaactctac	aagtgtctgt	60
cttcacactca	ctgtctgttaa	gcntnttaac	ccagactgta	tcttcataaa	tagaacaat	120
tcttcaccag	tcacatcttc	taggaccttt	ttggattcag	ttagtataag	ctcttcacact	180
tcttttgta	agactcttc	tggtaaagtc	ttaggttttg	tagaagaa	tttaattgct	240
cgttctctaa	caatgtcctc	tccttgaggt	atttggtgta	acaacccac	tnaagtcct	300
ttgtgcctcc	attttaaata	tacttaatag	ggcattggtn	cactaggtta	aattctgcac	360
gagtcactcg	tctgcacaaag	ttgcgttagt	atatctgcca			400

<210> 91

<211> 480

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(480)

<223> n = A,T,C or G

<400> 91

gagctcggat	ccaataatct	ttgtctgagg	gcagcacaca	tatncagtc	catggnaact	60
ggctcaccac	acatggggag	agcatgcggt	agntatataa	ggctcattcc	tgagtcagac	120
atgcctcttt	gactaccggt	tgccagtgtc	ggtgattctc	acacacctcc	nncgcctctt	180
tggtgaaaaa	ctggcacttg	nctggaacta	gcaagacatc	acttacaat	tcaccacaga	240
gacacttgaa	aggtgtaaca	aagcgactct	tgcaattgct	tttgtccctc	cgccaccagt	300
tgtcaatact	aaccgcgtgg	tttgctctca	tcacatttgt	gatctgtagc	tctggatata	360
tgtcctgaca	gtactgaaga	acttctctct	ttgtttcaaa	agcaactctt	ggtgcctgtt	420
ngatcagggt	cccatctccc	agtcggaatg	ttccatgtgc	atatnttact	tcccacaaaa	480

<210> 92

<211> 477

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(477)

<223> n = A,T,C or G

<400> 92

atcacagccca	natcccacga	cgaagatgag	cttgttgact	gagaacctga	tgcggtcact	60
ggctcccgctg	tagccccagc	gactctccac	ctgtctggaag	cggttgatgc	tgcaactcctt	120
cccacgcagg	cagcagcggt	gcccgtcaat	gaactccact	cggtggttgg	ggttgacggt	180
taantgcagg	aagagcgctga	ccacctcgctg	gtccaccagg	atgcccgact	gtcggggacc	240
tcgacgcaaa	ctcctcgatg	gtcatgagcg	ggaagcggaat	gangcccgagg	gccttgccca	300
gaacctctcg	cctgttctct	ggcgctcaact	gcagctgctg	ccgctnacac	tcggcctctg	360
accagcgagg	aaacggcgctt	gaacagccgc	acctcacgga	tgcccantgt	gtcgcgctcc	420
aggaacggcn	ccagcgtgtc	caggtcaatg	tcggtgaanc	ctccgcgggt	aatggcg	477

<210> 93

<211> 377

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)... (377)

<223> n = A,T,C or G

<400> 93

gaacggctgg	accttgccct	gcattgtgct	gctggcagga	ataccttggc	aagcagctcc	60
agtcgcagca	gccccagacc	gctgccgccc	gaagctaagc	ctgcctctgg	ccttcccctc	120
cgctcctaat	cagaacacant	agtgggagca	ctgtgtttag	agttaagagt	gaacactgtn	180
tgattttact	tgggaatttc	ctctgttata	tagcttttcc	caatgctaata	ttccaaaacaa	240
caacaacaaa	ataacatggt	tgctctgttna	gttgatataaa	agtangtgat	tctgtatnta	300
aagaaaatat	tactgtttaca	tatactgctt	gcaantttctg	tattttattgg	tnctctggaa	360
ataaatatat	tattaaa					377

<210> 94

<211> 495

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)... (495)

<223> n = A,T,C or G

<400> 94

ccctttgagg	ggttagggctc	cagttcccag	tggaagaaac	aggccaggag	aantgcgtgc	60
cgagctgag	cagatttccc	acagtgaacc	cagagccctg	ggctatagtc	tctgacccct	120
ccaaggaaaag	accacctctct	ggggacatgg	gctggagggc	aggacctaga	ggcacaagg	180
gaaggcccca	ttccggggctc	gttcccgcag	gaggaaggga	aggggctctg	tgtgccccc	240
acgagggaana	ggccctgant	cctgggatca	nacaccctct	cagtggtatc	cccacacaaa	300
tgcaagctca	ccaaggtccc	ctctcagtc	cttccctaca	ccctgaacgg	ncactggccc	360
acaccacccc	agancancca	cccgcctgg	ggaatgttct	caaggaatcg	cngggcaacg	420
tggactctng	tcccnnaagg	gggcagaaac	tccaatagan	gganngaacc	cttgctnana	480
aaaaaaaaana	aaaaa					495

<210> 95

<211> 472

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)... (472)

<223> n = A,T,C or G

<400> 95

ggttacttgg	tttctattgcc	accacttagt	ggatgtcatt	tagaaccatt	tigtctgctc	60
cctctggaag	ccttgccgag	agcggaacttt	gtaattgttg	gagaataact	gctgaatttt	120
tagctgtttt	gagttgattc	gcaccactgc	accacaactc	aatatgaaaa	ctatttnact	180
tattttatat	cttctgaaaa	gtatacaatg	aaaattttgt	tcatactgta	ttttacaagt	240
atgatgaaaa	gcaatagata	tatatctttt	tattatgttn	aattatgatt	gcoattatta	300
atcggcacaaa	tgtggagtgt	atgttctttt	cacagtaata	tatgcctttt	gtactttcac	360
ttggttattt	tattgtaaat	gaattacaaa	attcttaatt	taagaaaatg	gtangttata	420
tttatttcan	taattttctt	ccttgtttac	gttaattttg	aaaagaatgc	at	472

<210> 96

<211> 476

<212> DNA

<213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)... (476)
 <223> n = A,T,C or G

<400> 96
 ctgaagcatt tcttcaaact tntctacttt tgtcattgat accotgtagta agttgacaat 60
 gtggtgaaat ttcaaaatta tatgttaactt ctactagtgt tactttctcc cccaagtctt 120
 ttttaactca tgatttttac acacacaatc cagaacttat tatatagcct ctaagtcttt 180
 attcttcaca gtatagtgtt aaagagtcct ccagtgtctt gngcanaatg ttctagntat 240
 agctggatcac atacngtggtg agttctataa actcatacct cagtgggact naaccaaaat 300
 tgtgttagtc tcaattctcta ccacactgag ggagcctccc aaatcactat attcttatct 360
 gcaggtactc ctccagaaaa acngacaggg caggcttgca tgaaaaagtn acatctgcgt 420
 tacaagctct atcttctctca nangtctgtt aaggacaact ttaattctct agcttt 476

<210> 97
 <211> 479
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)... (479)
 <223> n = A,T,C or G

<400> 97
 actctttcta atgctgatat gatcttgagt ataagaatgc atatgtcact agaattggata 60
 aaataatgct gcaaaactaa tgttcttatg caaaatggaa cgctaagtga acacagctta 120
 caatcgcaaa tcaaaactca caagtgtctc tctgttgtag attttagtga ataagaactta 180
 gattgtgctc ctctggatgc gattgtttct canatcttgg gcaatnttcc ttagtcaaat 240
 caggctacta gaattctgtt attggatatn tgagagcatg aaatttttaa naatacactt 300
 gtgattatna aattaatcac aaatttcaact tatacctgct atcagcagct agaaaaacat 360
 ntntttttta natcaagata ttttgtgttt ggaantgttn aaatgaaatc tgaatgtggg 420
 ttonatctta ttttttcccn gaenactant tntcttttta gggntctattc tganccatc 479

<210> 98
 <211> 461
 <212> DNA
 <213> Homo sapien

<400> 98
 agtgacttgt cctccaacaa aaccocctga tcaagtttgt ggcactgaca atcagacctta 60
 tgctagtctc tgtcatctat tgcactactaa atgcagactg gaggggacca aaaaggggca 120
 tcaactccag ctggattatt ttggagcctg caaatctatt cctacttgtta cggactttga 180
 agtgattcag ttctctctac ggatgagaga ctggctcaa gaaatctcta tgcagcttta 240
 tgaagccact ctgaacacgc tgggtatcta gatgagaaca gagaataaaa gtcagaaaaa 300
 ttactctggag aaaagaggct ttggctgggg accatcccat tgaacctctt cttaaggact 360
 ttaagaaaaa ctaccacatg ttgtgtatcc tgggtccggc cgtttatgaa ctgaccaccc 420
 tttggaataa tcttgagcct cctgaacttg ctctctctg a 461

<210> 99
 <211> 171
 <212> DNA
 <213> Homo sapien

<400> 99
 gtggcgcgcg gcaggtgttt cctcgtaccg cagggccccc tcccttcccc aggcgtccct 60
 cggcgcctct gggggccoga ggagagcgg ctggcgggtg gggggagtgt gaccaccctt 120

cggtagagaaa agccttctct agcgatctga gagcggtgcc ttgggggtac c 171
 <210> 100
 <211> 269
 <212> DNA
 <213> Homo sapien
 <400> 100
 cgcccgcaag tgcaactcca gctggggccg tgcggacgaa gattctgcc gcaagtgtgc 60
 cgactgcgac gacggcgccg gcgacagtcg caggtgcagc gcggcgccct ggggtcttgc 120
 aaggctgagc tgacgcgcga gaggtcgtgt caagctccac gaccttgacg ccgtcgggga 180
 cagccggaaac agagcccggt gaagcgggag gcctcgggga gccctcgggg aagggcgggc 240
 cgagagatac gcaggtgcag gtggccgcc 269
 <210> 101
 <211> 405
 <212> DNA
 <213> Homo sapien
 <400> 101
 tttttttttt ttgtggaatc tactgcgagc acagcaggtc agcaacaagt ttatttttga 60
 gctagcaagg taacagggtta ggcatggtt acatgttcag gtcaacttcc ttgtcgttgc 120
 ttgattggtt tgccttttat gggcgggggg ggggtagggg aaacgaagca aataacattg 180
 agtgggtgca cctccctctt agaacctggt tacaaagctt gggcgagttc acctgggtgt 240
 tgacggtcat ttctttgaca tcaatgttat tagaagtcag gatatctttt agagagtcca 300
 ctgttctgga gggagattag ggtttcttgc caaatccac aaaatccact gaaaaagttg 360
 gatgatcagt acgaataccg aggcatactt tcatatcggt ggcca 405
 <210> 102
 <211> 470
 <212> DNA
 <213> Homo sapien
 <400> 102
 tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 60
 ggcaactaat ccatttttat ttcaaaatgt ctacaaattt aatcccatta taaggatttt 120
 tcaaaatcta aattattcaa attagccaaa tccattacca ataataccca aaaaacaaa 180
 atatactctt ttcagcaaac ttgttacata aataaaaaaa atatatacgg ctgggtgttt 240
 caaagtcaca ttactttaac actgcacaaa tttaaaggaa ctaaaataaa aaaaacacat 300
 ccgcaaaagg taaaggggac aacaaattct tttaacacac cattataaaa atcatatctc 360
 aaatcttagg ggaatatata ctccacacgg gatcttaact ttactcaact ttgtttattt 420
 ttttaaccca ttgtttgggc ccaacacaat ggaatccccc ctggactagt 470
 <210> 103
 <211> 581
 <212> DNA
 <213> Homo sapien
 <400> 103
 tttttttttt tttttttttt cccccctctt ataaaaaaca agttaccatt ttattttact 60
 tacacatatt tattttataa ttggtattag atattcaaaa ggcagctttt aaaaacaaa 120
 taagtggaaa ctgccttaga tacataattc ttaggattta gcttaaaatc tgccataagt 180
 gaaaatcttc tctagctctt ttgactgtaa atttttgact ctgttataac atccaaattc 240
 attttttctg tctttaaaat tatctaatct ttccattttt tccctattcc aagtcatttt 300
 gctctcttag cctcatttcc tagctcttat ctactattag taagtggctt ttttctaaa 360
 agggaaaaca ggaagagaaa tggcacacaa aacaaacatt ttatattcat atttctacct 420
 acgttaataa aatagcattt tgtgaagcca gctcaaaaga aggcttagat ccttttatgt 480
 ccattttagt cactaaacga tatcaaatgt cagaagtatg aaaggtttgt gaacatttat 540

tcaaaagcta atataagata ttccacatac tcatctttct g

581

<210> 104

<211> 578

<212> DNA

<213> Homo sapien

<400> 104

tttttttttt	tttttttttt	tttttctctt	cttttttttt	gaaatgagga	tcgagttttt	60
cactctctag	atagggcgat	aagaaaactc	atctttccag	ctttaaaaa	acaatcaaat	120
ctcttatgct	atatacatat	ttaaagttaa	ctaattgagtc	actggcttat	cttctcctga	180
aggaaatctg	ttcattcttc	tcattcatat	agttatatca	agtactacct	tgcatattga	240
gaggtttttc	ttctctatct	acacatatat	ttccatgtga	atttgtatca	aacctttatt	300
ttcatgcata	ctagaaaaa	atgtttcttt	tgcataagag	aagagacaa	tatagcattt	360
caaaactgct	caaatgtttt	gttaagtatt	ccattataat	tagttggcag	gagctaatac	420
aaatcacatt	tacgacagca	ataataaaac	tgaagtacca	gttaaatatc	caaaataatt	480
aaaggaacat	ttttagcctg	ggtataatta	gctaattcac	tttacaagca	tttattagaa	540
tgaattcaca	tgattattat	cctagcccaa	cacaatgg			578

<210> 105

<211> 538

<212> DNA

<213> Homo sapien

<400> 105

tttttttttt	tttttcagta	ataatcagaa	caatatttat	ttttatat	aaaattcata	60
gaaaagtgc	ttacatttaa	taaaagtttg	tttctcaaag	tgatcagagg	aattagatat	120
gtcttgaaca	ccaatattaa	tttgaggaaa	atacaccaaa	atacattaag	taaatatttt	180
aagatcatag	agcttgttaag	tgaaaagata	aaatttgacc	tcagaaaactc	tgagcattaa	240
aaatccaata	ttagcaaaaa	aattactatg	gacttcttgc	tttaattttg	tgatgaatat	300
gggggtgcac	tggtaaacca	acacattctg	aaggatacat	tacttagtga	tagattctta	360
tgtacttttg	taatacgtgg	atatgagttg	acaagtttct	ctttcttcaa	tcctttaaag	420
ggcgagaaat	gaggaagaaa	agaaaaggat	tacgcatact	gttctttcta	tggaaggatt	480
agatatgttt	cctttgccaa	tattaaaaaa	ataataatgt	ttaactactg	tgaacccc	538

<210> 106

<211> 473

<212> DNA

<213> Homo sapien

<400> 106

tttttttttt	tttttttagt	aagtttctat	ttttattata	attaaagtct	tggtcatttc	60
atttatttag	tcctgcaact	acatatttaa	attaaagaaa	cgttttagac	aactgtacaa	120
tttataaatg	taaggtgcca	ttattgagta	atatattctc	ccaagagtgg	atgtgtccct	180
tctcccacca	actaatgaac	agcaacatta	gttttaatttt	attagttagt	ataactgct	240
gcaaacgcta	attctctctt	ccatccccat	gtgatattgt	gtatatgtgt	gagttggtag	300
aatgcataac	aatctacaat	caacagcaag	atgaagctag	gctgggcttt	cggtgaaaat	360
agactgtgtc	tgtctgaact	aaatgatctg	acctatctct	ggtggcaaga	actcttcgaa	420
cgcctctctc	aaaggcgctg	ccacatttgt	ggctctttgc	actgttttca	aaa	473

<210> 107

<211> 1621

<212> DNA

<213> Homo sapien

<400> 107

cgccatggca	ctgcagggca	tctcggtcat	ggagctgtcc	ggcctggccc	cgggcccggt	60
ctgtgctatg	gtcctggctg	acttcggggc	gcgtgtggta	cgcgtggacc	ggcccggctc	120

```

ccgcctacgac gtgagccgct tgggcggggg caagcgctcg ctagtgtctg acctgaagca 180
gccgcgggga gccgcctgtc tgcggcgctct gtgcaagcgg tcggatgtgc tgcgtggagcc 240
cttcgccgcg ggtgtcatgg agaaactcca gctgggcccc gagattctcg accgcgggaaaa 300
tccaaaggctt atttatgcca ggctgagttg atttggccag tcaggaaagt tctgcccgttt 360
agctggccac gatatacaact atttggtctt gtccagtggt ctctcaaaaa ttggcagaag 420
tggtgagaat ccgtatgcc ccgtgaaatc ctgggtgac ttgtctggt gtggccttat 480
gtgtgcactg ggcattataa tggctctttt tgaccgcaca cgcactgaca agggtcaggt 540
cattgatcca aatatgggtg aaggaacagc atatttaagt tcttttctgt gtggccttat 600
gaaatcgaat ctgtgggaag caccctgagg acagaacatg ttggatgggt gagcaccttt 660
ctatacgact tacaggacag cagatgggga attcatggct gtggagcaa tagaacccca 720
gttctacgag ctgctgatca aaggacttgg actaaagtct gatgaacttc ccaatcagat 780
gagcatggat gattggccag aaatgaagaa gaagtgttgc gatgtattg caaagaagac 840
gaaggcagag tgggtgcaaa tctttgacgg cacagatgcc tgtgtgact cggttctgac 900
ttttgaggag gttgttcac atgatcacia caaggaaacgg ggctgttta tcaccagtga 960
ggagcaggac gtgagccccc gccctgcaac tctgctgtta aacaccccag ccattcccttc 1020
ttcctaaagg gatcctttca tagggagaaca cactgaggag atacttgaag aatttggatt 1080
cagccgcgaa gagattttac agcttaactc agataaaatc attgaaagta ataaagtatt 1140
agctagtctc taacttccag gccccaggct caagtgaatt tgaatactgc atttacagtg 1200
tagagtacca cataacattg tatgcatgga aacatggagg aacagtatta cagtgtccta 1260
ccactctaata caagaaaaga attacagact ctgattctac agtgatgatt gaattctaaa 1320
aatggttatc attagggctt ttgatttata aaactttggg tacttatact aattataggt 1380
agttattctg ccttcagatt tgcctgatat attgttgat attaagatct ttgacttata 1440
ttttgaatgg gttctagtga aaaaggaatg atatatctct gaagacatgc atatacattt 1500
atttacactc ttgattctac aatgtagaaa atgaggaaat gccacaaatt gtatggtgat 1560
aaaagtcacg tgaacaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1621
a

```

<210> 108

<211> 382

<212> PRT

<213> Homo sapien

<400> 108

```

Met Ala Leu Gln Gly Ile Ser Val Met Glu Leu Ser Gly Leu Ala Pro
1 5 10 15
Gly Pro Phe Cys Ala Met Val Leu Ala Asp Phe Gly Ala Arg Val Val
20 25 30
Arg Val Asp Arg Pro Gly Ser Arg Tyr Asp Val Ser Arg Leu Gly Arg
35 40 45
Gly Lys Arg Ser Leu Val Leu Asp Leu Lys Gln Pro Arg Gly Ala Ala
50 55 60
Val Leu Arg Arg Leu Cys Lys Arg Ser Asp Val Leu Leu Glu Pro Phe
65 70 75 80
Arg Arg Gly Val Met Glu Lys Leu Gln Leu Gly Pro Glu Ile Leu Gln
85 90 95
Arg Glu Asn Pro Arg Leu Ile Tyr Ala Arg Leu Ser Gly Phe Gly Gln
100 105 110
Ser Gly Ser Phe Cys Arg Leu Ala Gly His Asp Ile Asn Tyr Leu Ala
115 120 125
Leu Ser Gly Val Leu Ser Lys Ile Gly Arg Ser Gly Glu Asn Pro Tyr
130 135 140
Ala Pro Leu Asn Leu Leu Ala Asp Phe Ala Gly Gly Gly Leu Met Cys
145 150 155 160
Ala Leu Gly Ile Ile Met Ala Leu Phe Asp Arg Thr Arg Thr Asp Lys
165 170 175
Gly Gln Val Ile Asp Ala Asn Met Val Glu Gly Thr Ala Tyr Leu Ser
180 185 190
Ser Phe Leu Trp Lys Thr Gln Lys Ser Ser Leu Trp Glu Ala Pro Arg

```

195	200	205
Gly Gln Asn Met Leu Asp Gly Gly Ala Pro Phe Tyr Thr Thr Tyr Arg		
210	215	220
Thr Ala Asp Gly Glu Phe Met Ala Val Gly Ala Ile Glu Pro Gln Phe		
225	230	235
Tyr Glu Leu Leu Ile Lys Gly Leu Gly Leu Lys Ser Asp Glu Leu Pro		
245	250	255
Asn Gln Met Ser Met Asp Asp Trp Pro Glu Met Lys Lys Lys Phe Ala		
260	265	270
Asp Val Phe Ala Lys Lys Thr Lys Ala Glu Trp Cys Gln Ile Phe Asp		
275	280	285
Gly Thr Asp Ala Cys Val Thr Pro Val Leu Thr Phe Glu Glu Val Val		
290	295	300
His His Asp His Asn Lys Glu Arg Gly Ser Phe Ile Thr Ser Glu Glu		
305	310	315
Gln Asp Val Ser Pro Arg Pro Ala Pro Leu Leu Leu Asn Thr Pro Ala		
325	330	335
Ile Pro Ser Phe Lys Arg Asp Pro Phe Ile Gly Glu His Thr Glu Glu		
340	345	350
Ile Leu Glu Glu Phe Gly Phe Ser Arg Glu Glu Ile Tyr Gln Leu Asn		
355	360	365
Ser Asp Lys Ile Ile Glu Ser Asn Lys Val Lys Ala Ser Leu		
370	375	380

<210> 109

<211> 1524

<212> DNA

<213> Homo sapien

<400> 109

ggcagcaggc	tgccgccaagg	cctgagcggg	ggcgggggca	gcctgcgcag	cgggggccccc	60
gggctcgccc	atgcctcact	gagccacggc	ctgcgcctct	acctgcgcga	cagctgggaac	120
cagtgccagc	tagtggtctc	cactctgttc	ctcctggggc	tggtgtgccg	gctgacccccc	180
ggtttgtagc	acctggggccg	cactgtcctc	tgcatcgact	tcatggtttt	cacgttgccg	240
ctgcttcaca	tcttcacggc	caacaaacag	ctggggccca	agatcgtcat	cgtgagcaag	300
atgatgaagg	acgtgtctct	cttcctcttc	tctcctggcg	tggtgtgtgt	agcctatggc	360
gtggccacgg	aggggtcctc	gagggccacg	gacagtgaat	tcccaaglat	actgcgcgcg	420
gtctcttacc	gtccctactc	gcagatcttc	gggcagatcc	cccagaggga	catggacgtg	480
gccctcatgg	agcagaccaa	ctgctcgtcg	gagcccggtc	tctgggcaca	ccctcctggg	540
gccagggcgg	gcacctgcgt	ctccacgtat	gccaaactgg	tggtgtgtgt	gctcctcgtc	600
atcttctcgc	tcgtggccaa	catcctgctg	gtcaacttgc	tcattgccat	gttcagttac	660
acattcggca	aagtacaggg	caacagcgat	ctctacttga	aggcgacggc	ttaccgcctc	720
atccgggaat	tccactctcg	gcccgcgctg	gccccgcctc	ttatcgteat	ctcccacttg	780
cgctcctcgc	tcaggcaatt	gtgcaggcga	ccccggagcc	cccagccgtc	ctcccgcgcc	840
ctcgagcatt	tcgggtttta	cttttctaag	gaagccgagc	ggaagctgct	aacgtgggaa	900
tcgggtcata	aggagaactt	tctgctggca	cgcgctaggg	acaagcggga	gagcgactcc	960
gagcgtctca	agcgcaegtc	ccagaaggtg	gaacttggac	tgaacacgct	gggacacatc	1020
cgcgagtagc	aacagcgccct	gaaagtgtcg	gagcggggag	tccagcagtg	tagccgcgtc	1080
ctgggggtggg	tgggcggaggc	cctgagccgc	tctgccttgc	tgcccgcagg	tgggccgcga	1140
ccccctgacc	tgctctgggtc	caaaagactga	gcctctggtg	cggactctca	ggagaagccc	1200
ccacagggga	ttttgtcctc	agagttaagg	tcatctgggc	ctcggccccc	gcacctgtgtg	1260
gccttgtctc	tgagtgagc	cccatgtcca	tctggggccc	tgtaaggacc	acctttggga	1320
gtgtcatcct	tacaaaccac	agcatgcccg	gctcctccca	gaaccagctc	cagcctggga	1380
ggatcaaggc	ctggatcccg	ggccgtttac	catctggagg	ctgcagggtc	cttggggtaa	1440
cagggaccac	agaccctcct	ccactcacag	attcctcaca	ctgggggaaat	aaagccattt	1500
cagaggaaaa	aaaaaaaaaa	aaaa				1524

<210> 110

<211> 3410
 <212> DNA
 <213> Homo sapien

<400> 110

gggaaccagc	ctgcacgcgc	tggctccggg	tgacacgcgc	ggccctcggc	caggatctga	60
gtgatgagac	gtgtcccccac	tgaggtgcc	cacacagcga	gggtgtgagc	atgggctgag	120
aaagtgcagc	ggcaccacaa	ggctggcaga	aatgggcgcc	tggtgatctc	ctaggcagtt	180
ggcggcagca	aggagagagc	ggccgagctt	ctggagcaga	ggccgagacga	agcaggtctg	240
gagtgccctga	acggccccct	gagccctacc	cgccctggccc	actatggctc	agaggtctgt	300
ggtagccgc	ctgctgcgcg	accggaaagc	ccagctcttg	ctggtcaacc	tgctaacctt	360
tgccctggag	gtgtgttttg	ccgcaggcat	caoctatgtg	ccgcctctcg	tggtggaagt	420
gggggtagag	gagaagttca	tgacctaggt	gctgggcat	gggtccagtg	tggtccctgt	480
ctgtgtcccg	ctcctaggtc	cagccagtg	ccactggcgt	ggacgctatg	ggcccgccgc	540
ggccctcatc	tgggcactgt	cttgggcat	ccctgtgagc	ctctttctca	tcccaagggc	600
cggtgcgcta	gcagggcctg	tgtgcccgga	tcccaaggccc	ctggagctgg	cactgctcat	660
ccctggcgct	gggctgctgg	acttctgtgg	ccagggtgtg	ttcactccac	tgaggccctt	720
gctctctgac	ctcttccggg	accggacca	ctgtcccgag	gctactctgt	tctatgctt	780
catgatcagt	cttgggggct	gctgggcta	ccctcctgct	gccattgact	gggacacag	840
tgccctggcc	ccctacctgg	gcaccaggga	ggagtgctc	tttggtcctg	tcacctcat	900
cttctcagcc	tgctgtacag	ccactgct	ggtggctgag	gaggcagcgc	tgggccccc	960
cgagccagca	gaagggtcgt	cgccccctc	ctgtcccgcc	cactgctgtc	catgccgggc	1020
ccgcttgact	ttccgggaacc	tgggcgccct	gcttcccgcc	ctgcaccagc	tggtgctgcg	1080
catgccccgc	accctgcgcc	ggctcttctg	ggctgagctg	tgacgtgga	tggaactcat	1140
agccttcacg	ctgttttaca	cggaattcgt	gggcgagggg	ctgtaccagc	ggctgcacag	1200
gactgagcgt	ggcaccggag	cccgagacga	ctatgatgaa	ggcgttcgga	tgggcagcct	1260
ggggctgttc	ctgcagtgcc	ccactccct	ggctctctct	ctgttcaggg	accggctgg	1320
gcagcagattc	ggcaactgag	cagtctattt	ggcagctttc	cgagctttcc	ctgtggctgc	1380
cggtgccaca	tgctgtcccc	acagtggtgc	cgtgggtgaca	gcttcagcgc	ccctcacccg	1440
gttcaacctc	tcagccctgc	agatcctgcc	ctacacactg	gctctcctct	accacccggga	1500
gaagcaggtg	ttcctgccca	aataccgagg	ggacactgga	gggtgctaga	gtgaggacag	1560
tgatgtctcc	agcttctctg	caggccctaa	gcttggagct	cccttcccta	atggacacgt	1620
gggtgctgga	ggcagtgccc	tgctccacc	tccaccgcgc	ctctgcgggg	cctctgcctg	1680
tgatgtctcc	tgactgtgtg	tggtgggtga	gcccacogag	ggcagggtgg	ttccggggccg	1740
gggcatctgc	ctggacctcg	ccactctgga	tagtgctctc	ctgctgtccc	aggtggcccc	1800
atccctgttt	atgggctcca	ttgtccagct	cagccagctc	gtcactgctc	atatggtgtc	1860
tgccgcagcc	ctgggtgtcg	tcgccattta	ctttgtctaca	caggtagtat	ttgacaaag	1920
cgacttgccc	aaataactcag	ctgagaaaac	ttccagcaca	ttgggtggga	gggctgcct	1980
cactgggtcc	cagctccccc	ctctctgttag	cccccatggg	ctgcggggct	ggccgcaggt	2040
ttctgttgtc	gcaaaagtaa	tggtgtctct	tgctgccacc	ctgtgtgtct	gaggtgcgt	2100
gctgcacagc	tgggggctgg	ggcgtccctc	tcctctctcc	ccagctctca	gggtgctgt	2160
actggaagcc	ttccaaaggg	gtttcaagt	ggacttatcc	agggaggcca	gaagggtctc	2220
atgcagtgga	atgcggggag	ctgcagggtg	gattaccagc	gctcagggtg	aacagctagc	2280
ctcctagatg	agacacacct	agagaagggt	ttttgggagc	tgaataaact	cagtaacctg	2340
gtttcccatc	cttaagcccc	ttaaacctgca	gcttcgttta	atgtagctct	tgcatgggag	2400
ttctaggatg	gaaacactcc	tccatgggat	ttgaacatat	gacttatttg	tagggggaag	2460
gtctcagagg	gcacacacga	agaaccaggt	ccctcagacc	caacagcactg	cttttttctg	2520
gatccacccc	gctcttaact	tttatcagga	tggtgcctgt	tggtcctctc	gtgtccatca	2580
gcagagacga	ggcattttaa	tatttaactt	atttatttaa	caaaagtagaa	gggaatccat	2640
tgctagcttt	ctgtgtgttg	tgcttaatat	ttgggttaggg	tgggggatcc	ccaacatcat	2700
ggtccccctg	gataagctgt	cattgggctg	atcattgcga	gaactctctc	ctctgggggt	2760
ctggcccccc	aaaatgccta	accacaggac	ttggaaatcc	tactcatccc	aaatgataat	2820
tccaaatgct	gttaccacaag	gttaggtgtg	tgaagggaag	tagaggggtg	ggcttcaggt	2880
ctcaacggct	tccttaaccca	ccctctctct	cttggccacc	ccctgttccc	ccacttcca	2940
ctcccctcta	ctctctctag	gactgggctg	atgaaggcac	tgcccaaaat	ttcccctacc	3000
cccaacttcc	gaactcccc	aaacttcccc	accagctcca	caacccctgt	ttgagctact	3060
gcagaccagc	aagcacaaag	tgccgtttcc	caagccttgc	tccatctcag	cccccgaggt	3120
atatctgtgc	ttgggggaatc	tcacacagaa	actcaggagc	accocctgcg	tgagctaaag	3180

gaggtcttat	ctctcagggg	gggtttaagt	gocgtttgca	ataatgtcgt	cttattttat	3240
tagcggggtg	aatatcttat	actgtaagt	agcaatcaga	gtataatgtt	tatggtgaca	3300
aaatataaag	ctttcttata	tgtttaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	3360
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa		3410

<210> 111
 <211> 1289
 <212> DNA
 <213> Homo sapien

<400> 111

agccagcggt	ccctctgcct	gcccactcag	tggcaacacc	cgggagctgt	ttgtccttt	60
gtggagcctc	agcagttccc	tctttcagaa	ctcactgcc	agagccctga	acaggagcca	120
ccatgcagtg	cttcagcttc	attaagacca	tgatgatcct	cttcaatttg	ctcatctttc	180
tgtgtggtgc	agccctgttg	gcagtgggca	tctgggtgtc	aatcgatggg	gcactctttc	240
tgaagatctt	cgggccactg	tcgtccagtg	ccatgcagtt	tgtcaacgtg	ggctactctc	300
tcacgcgacg	cggcggtgtg	gtctttgtct	ttggtttctc	gggctgctat	ggtgctaaga	360
ctgagagcaa	gtgtgccttc	gtgacgttct	tcttcatcct	cctcctcatc	ttcattgctg	420
aggttgacgc	tgctgtggtc	gccttggtgt	acaccacaat	ggctgagcac	ttcctgaagt	480
tgctggtagt	gcctgccatc	aagaagatt	atggttccca	ggaagacttc	actcaagtgt	540
ggaacaccac	catgaaagg	ctcaagtgtc	gtggcttcac	caactatagg	gtttttgagg	600
actcaacccta	cttcaaaagg	aacagtgcct	ttccccatt	ctgttgcaat	gacaacgtca	660
ccaacacagc	caatgaaaac	tgacacaagc	aaaaggctca	cgaccacaaa	gtagagggtt	720
gcttcaatca	gcttttgtat	gacatccgaa	ctaatgcagt	caccgtgggt	ggtgtggcag	780
ctgggaattg	gggcctcgag	ctggctgcc	tgattgtgtc	catgtatctg	tactgcaatc	840
tacaaatagt	ccactttctg	ctctgccact	actgctgcc	catgggaact	gtgaagagcc	900
accctggcaa	gcagcagtg	ttgggggagg	ggacaggatc	taacaatgtc	acttgggcca	960
gaatggacct	gccctttctg	ctccagactt	ggggctagat	agggaacctc	ccttttagcg	1020
atgcctgact	ttccttccat	tggtgggtgg	atgggtgggg	ggcattccag	agcctctaag	1080
tagcgcagtt	ctgttgccca	ttccccagtt	ctattaacc	cttgatatgc	cccttaggcc	1140
tagtgggtat	cccagtgctc	tactggggga	tgagagaaa	gcattttata	gcctgggcat	1200
aagtgaatc	agcagagcct	ctgggtggat	gtgtagaagg	cacttcaaaa	tgcataaacc	1260
tgttacaatg	ttaaaaaaa	aaaaaaaaa				1289

<210> 112
 <211> 315
 <212> PRT
 <213> Homo sapien

<400> 112

Met	Val	Phe	Thr	Val	Arg	Leu	Leu	His	Ile	Phe	Thr	Val	Asn	Lys	Gln
1				5					10					15	
Leu	Gly	Pro	Lys	Ile	Val	Ile	Val	Ser	Lys	Met	Met	Lys	Asp	Val	Phe
			20					25					30		
Phe	Phe	Leu	Phe	Phe	Leu	Gly	Val	Trp	Leu	Val	Ala	Tyr	Gly	Val	Ala
			35				40					45			
Thr	Glu	Gly	Leu	Leu	Arg	Pro	Arg	Asp	Ser	Asp	Phe	Pro	Ser	Ile	Leu
			50				55				60				
Arg	Arg	Val	Phe	Tyr	Arg	Pro	Tyr	Leu	Gln	Ile	Phe	Gly	Gln	Ile	Pro
			65				70			75				80	
Gln	Glu	Asp	Met	Asp	Val	Ala	Leu	Met	Glu	His	Ser	Asn	Cys	Ser	Ser
				85					90					95	
Glu	Pro	Gly	Phe	Trp	Ala	His	Pro	Pro	Gly	Ala	Gln	Ala	Gly	Thr	Cys
			100					105					110		
Val	Ser	Gln	Tyr	Ala	Asn	Trp	Leu	Val	Val	Leu	Leu	Leu	Val	Ile	Phe
			115				120					125			
Leu	Leu	Val	Ala	Asn	Ile	Leu	Leu	Val	Asn	Leu	Leu	Ile	Ala	Met	Phe
			130			135					140				

Ser Tyr Thr Phe Gly Lys Val Gln Gly Asn Ser Asp Leu Tyr Trp Lys
 145 150 155 160
 Ala Gln Arg Tyr Arg Leu Ile Arg Glu Phe His Ser Arg Pro Ala Leu
 165 170 175
 Ala Pro Pro Phe Ile Val Ile Ser His Leu Arg Leu Leu Arg Gln
 180 185 190
 Leu Cys Arg Arg Pro Arg Ser Pro Gln Pro Ser Ser Pro Ala Leu Glu
 195 200 205
 His Phe Arg Val Tyr Leu Ser Lys Glu Ala Glu Arg Lys Leu Leu Thr
 210 215 220
 Trp Glu Ser Val His Lys Glu Asn Phe Leu Leu Ala Arg Ala Arg Asp
 225 230 235 240
 Lys Arg Glu Ser Asp Ser Glu Arg Leu Lys Arg Thr Ser Gln Lys Val
 245 250 255
 Asp Leu Ala Leu Lys Gln Leu Gly His Ile Arg Glu Tyr Glu Gln Arg
 260 265 270
 Leu Lys Val Leu Glu Arg Glu Val Gln Gln Cys Ser Arg Val Leu Gly
 275 280 285
 Trp Val Ala Glu Ala Leu Ser Arg Ser Ala Leu Leu Pro Pro Gly Gly
 290 295 300
 Pro Pro Pro Pro Asp Leu Pro Gly Ser Lys Asp
 305 310 315

<210> 113

<211> 553

<212> PRT

<213> Homo sapien

<400> 113

Met Val Gln Arg Leu Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala
 1 5 10 15
 Gln Leu Leu Leu Val Asn Leu Leu Thr Phe Gly Leu Glu Val Cys Leu
 20 25 30
 Ala Ala Gly Ile Thr Tyr Val Pro Pro Leu Leu Glu Val Gly Val
 35 40 45
 Glu Glu Lys Phe Met Thr Met Val Leu Gly Ile Gly Pro Val Leu Gly
 50 55 60
 Leu Val Cys Val Pro Leu Leu Gly Ser Ala Ser Asp His Trp Arg Gly
 65 70 75 80
 Arg Tyr Gly Arg Arg Pro Phe Ile Trp Ala Leu Ser Leu Gly Ile
 85 90 95
 Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala Gly Trp Leu Ala Gly Leu
 100 105 110
 Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu Ala Leu Leu Ile Leu Gly
 115 120 125
 Val Gly Leu Leu Asp Phe Cys Gly Gln Val Cys Phe Thr Pro Leu Glu
 130 135 140
 Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro Asp His Cys Arg Gln Ala
 145 150 155 160
 Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu Gly Gly Cys Leu Gly Tyr
 165 170 175
 Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser Ala Leu Ala Pro Tyr Leu
 180 185 190
 Gly Thr Gln Glu Cys Leu Phe Gly Leu Leu Thr Leu Ile Phe Leu
 195 200 205
 Thr Cys Val Ala Ala Thr Leu Leu Val Ala Glu Glu Ala Ala Leu Gly
 210 215 220
 Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala Pro Ser Leu Ser Pro His

225							230								235				240
Cys	Cys	Pro	Cys	Arg	Ala	Arg	Leu	Cys	Ala	Phe	Arg	Asn	Leu	Gly	Ala	Leu			
				245						250					255				
Leu	Pro	Arg	Leu	His	Gln	Leu	Cys	Cys	Arg	Met	Pro	Arg	Thr	Leu	Arg				
			260						265					270					
Arg	Leu	Phe	Val	Ala	Glu	Leu	Cys	Ser	Trp	Met	Ala	Leu	Met	Thr	Phe				
		275					280						285						
Thr	Leu	Phe	Tyr	Thr	Asp	Phe	Val	Gly	Glu	Gly	Leu	Tyr	Gln	Gly	Val				
	290				295						300								
Pro	Arg	Ala	Glu	Pro	Gly	Thr	Glu	Ala	Arg	Arg	His	Tyr	Asp	Glu	Gly				
305				310						315				320					
Val	Arg	Met	Gly	Ser	Leu	Gly	Leu	Phe	Leu	Gln	Cys	Ala	Ile	Ser	Leu				
			325						330				335						
Val	Phe	Ser	Leu	Val	Met	Asp	Arg	Leu	Val	Gln	Arg	Phe	Gly	Thr	Arg				
		340						345					350						
Ala	Val	Tyr	Leu	Ala	Ser	Val	Ala	Ala	Phe	Pro	Val	Ala	Ala	Gly	Ala				
	355					360						365							
Thr	Cys	Leu	Ser	His	Ser	Val	Ala	Val	Val	Thr	Ala	Ser	Ala	Ala	Leu				
	370					375					380								
Thr	Gly	Phe	Thr	Phe	Ser	Ala	Leu	Gln	Ile	Leu	Pro	Tyr	Thr	Leu	Ala				
385				390						395				400					
Ser	Leu	Tyr	His	Arg	Glu	Lys	Gln	Val	Phe	Leu	Pro	Lys	Tyr	Arg	Gly				
			405						410					415					
Asp	Thr	Gly	Gly	Ala	Ser	Ser	Glu	Asp	Ser	Leu	Met	Thr	Ser	Phe	Leu				
		420						425					430						
Pro	Gly	Pro	Lys	Pro	Gly	Ala	Pro	Phe	Ser	Asn	Gly	His	Val	Gly	Ala				
	435					440						445							
Gly	Gly	Ser	Gly	Leu	Leu	Pro	Pro	Pro	Pro	Ala	Leu	Cys	Gly	Ala	Ser				
	450				455						460								
Ala	Cys	Asp	Val	Ser	Val	Arg	Val	Val	Val	Gly	Glu	Pro	Thr	Glu	Ala				
465				470						475				480					
Arg	Val	Val	Pro	Gly	Arg	Gly	Ile	Cys	Leu	Asp	Leu	Ala	Ile	Leu	Asp				
			485						490					495					
Ser	Ala	Phe	Leu	Leu	Ser	Gln	Val	Ala	Pro	Ser	Leu	Phe	Met	Gly	Ser				
		500						505					510						
Ile	Val	Gln	Leu	Ser	Gln	Ser	Val	Thr	Ala	Tyr	Met	Val	Ser	Ala	Ala				
	515						520					525							

```
<210> 114
<211> 241
<212> PRT
<213> Homo sapien
```

<400> 114																	
Met	Gln	Cys	Phe	Ser		Phe	Ile	Lys	Thr	Met	Met	Ile	Leu	Phe	Asn	Leu	
1				5						10					15		
Leu	Ile	Phe	Leu	Cys		Gly	Ala	Ala	Leu	Leu	Ala	Val	Gly	Ile	Trp	Val	
			20						25					30			
Ser	Ile	Asp	Gly	Ala		Ser	Phe	Leu	Lys	Ile	Phe	Gly	Pro	Leu	Ser	Ser	
		35						40					45				
Ser	Ala	Met	Gln	Phe		Val	Asn	Val	Gly	Tyr	Phe	Leu	Ile	Ala	Ala	Gly	
	50						55					60					
Val	Val	Val	Phe	Ala		Leu	Gly	Phe	Leu	Gly	Cys	Tyr	Gly	Ala	Lys	Thr	
65						70				75					80		

Glu Ser Lys Cys Ala Leu Val Thr Phe Phe Phe Ile Leu Leu Leu Ile
 85 90 95
 Phe Ile Ala Glu Val Ala Ala Val Val Ala Leu Val Tyr Thr Thr
 100 105 110
 Met Ala Glu His Phe Leu Thr Leu Leu Val Val Pro Ala Ile Lys Lys
 115 120 125
 Asp Tyr Gly Ser Gln Glu Asp Phe Thr Gln Val Trp Asn Thr Thr Met
 130 135 140
 Lys Gly Leu Lys Cys Cys Gly Phe Thr Asn Tyr Thr Asp Phe Glu Asp
 145 150 155 160
 Ser Pro Tyr Phe Lys Glu Asn Ser Ala Phe Pro Pro Phe Cys Cys Asn
 165 170 175
 Asp Asn Val Thr Asn Thr Ala Asn Glu Thr Cys Thr Lys Gln Lys Ala
 180 185 190
 His Asp Gln Lys Val Glu Gly Cys Phe Asn Gln Leu Leu Tyr Asp Ile
 195 200 205
 Arg Thr Asn Ala Val Thr Val Gly Gly Val Ala Ala Gly Ile Gly Gly
 210 215 220
 Leu Glu Leu Ala Ala Met Ile Val Ser Met Tyr Leu Tyr Cys Asn Leu
 225 230 235 240
 Gln

<210> 115
 <211> 366
 <212> DNA
 <213> Homo sapien

<400> 115
 gctctttctc tccctctctc tgaatttaac tctttcaact tgcaatttgc aaggattaca 60
 catttcactg tgatgtatat tgtgtttgcaa aaaaaaaaaa gtgtctttgt ttaaaattac 120
 ttggtttgtg aatccatctt gctttttccc cattggaact agtcattaac ccactctctga 180
 actggttagaa aaacatctga agagctagtc tatcagcattc tgacagggtga attggtatggt 240
 tctcagaacc atttcaccca gacagcctgt ttctatctctg ttttaataaat tagtttgggt 300
 tctctacatg catacaaac cctgtctcaa tctgtcacat aaaagtctgt gacttgaagt 360
 ttagtc 366

<210> 116
 <211> 282
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(282)
 <223> n = A,T,C or G

<400> 116
 acaagatga accatttctt atattatagc aaaattaaaa tctaccogta ttctaatatt 60
 gagaaatgag atnaaacaca atnttataaa gtctacttag agaagatcaa gtgacctcaa 120
 agactttact attttcatat tttaagacac atgattttac ctattttagt aactcgtgtc 180
 atacgttaaa caaaggtataa tgtgaacagc agagaggatt tgttggcaga aaatctatgt 240
 tcaatctnga actatctana tcacagacat ttctatttct tt 282

<210> 117
 <211> 305
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(305)
 <223> n = A,T,C or G

<400> 117
 acacatgtcg cttcactgcc ttcttagatg cttctgggtca acatanagga acaggggacca 60
 tatttatcct ccctcctgaa acaattgcaa aataanacaa aatatatgaa acaattgcaa 120
 aataaggcaa aatatatgaa acaacaggtc tcgagatatt ggaaatcagt caatgaagga 180
 tactgatecc tgatcaactgt cctaattgcag gatgtgggaa acagatgagg tcacctctgt 240
 gactgccccca gcttactgcc tgtagagagt ttctangetg cagttcagac agggagaaat 300
 tgggt 305

<210> 118
 <211> 71
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(71)
 <223> n = A,T,C or G

<400> 118
 accaaggtgt ntgaatctct gaactgggga tctctgattc ccgcacaatc tgagtggaaa 60
 aantcctggg t 71

<210> 119
 <211> 212
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(212)
 <223> n = A,T,C or G

<400> 119
 actccgggttg gtgtcagcag cactgtgcat tgaacatngc aatgtggagc ccaaacacaca 60
 gaaaatgggg tgaaattggc caactttcta tnaacttatg ttggcaant tgccaccaac 120
 agtaagctgg cccttctaataaaaagaaaat tgaagggttt ctactaanc ggaattaant 180
 aatggantca aganaactccc aggcctcagc gt 212

<210> 120
 <211> 90
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(90)
 <223> n = A,T,C or G

<400> 120
 actcgttgca natcaggggc cccccagagt caccgttgca ggagtccttc tggttcttgc 60
 ctcgcgggc gcagaacatg ctgggggtgt 90

<210> 121
 <211> 218
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(218)
 <223> n = A,T,C or G

<400> 121
 tgtancgtga anacgacaga nagggttgtc aaaaatggag aanccttgaa gtcattttga 60
 gaataagatt tgctaaaaga ttgggggcta aaacatgggt attgggagac atttctgaag 120
 atatncangt aaattangga atgaattcat ggttcttttg ggaattcctt tacgatngcc 180
 agcatanact tcatgtgggg atancagcta cccttgta 218

<210> 122
 <211> 171
 <212> DNA
 <213> Homo sapien

<400> 122
 taggggtgta tgcaactgta aggacaaaaa ttgagactca actggcttaa ccaataaagg 60
 catttgtag ctcatggaac aggaagtcgg atgggtgggc atcttcagtg ctgcatgagt 120
 caccaccccg gcggggtcat ctgtgccaca ggtccctgtt gacagtgagg t 171

<210> 123
 <211> 76
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(76)
 <223> n = A,T,C or G

<400> 123
 tgtagcgtga agacnacaga atgggtgtgtg ctgtgctatc caggaaacaca tttattatca 60
 ttatcaanta ttgtgt 76

<210> 124
 <211> 131
 <212> DNA
 <213> Homo sapien

<400> 124
 acctttcccc aaggccaatg tctgtgtgc taactggcgg gctgcaggac agctgcaatt 60
 caatgtgctg ggtcatatgg aggggaggag actctaaaaa agccaatttt atttctcttg 120
 ttaagatttg t 131

<210> 125
 <211> 432
 <212> DNA
 <213> Homo sapien

<400> 125
 accttatcta ctggctatga aatagatggt ggaaaattgc gttaccaact ataccactgg 60
 cttgaaaaag aggtgatagc tctcagagg acttgtagt tttgctcaga tgcgtgaaga 120

```

ctacagtcgt catttgccag aatgaagat gaatttggat taaatgagga tgctgaagat 180
ttgcttcacc aaacaaaagt gaaacaaactg agagaaaatt ttcaggaaaa aagacagtgg 240
ctcttgaagt atcagtcact ttgagaatg tttcttagtt actgcatact tcatggatcc 300
catggtgggg gtcttgcatc tgtaagaatg gaattgattt tgcttttgca agaattctcag 360
caggaaacat cagaaccact attttctagc cctctgtcag agcaaacctc agtgctcttc 420
ctctttgett gt 432

```

```

<210> 126
<211> 112
<212> DNA
<213> Homo sapien

```

```

<400> 126
acacaaacttg aatagtaaaa tagaaactga gctgaaattt ctaattcact ttctaaccat 60
agtgaagaatg atatttcccc ccagggatca ccaataattt ataaaaattt gt 112

```

```

<210> 127
<211> 54
<212> DNA
<213> Homo sapien

```

```

<400> 127
accacgaaac cacaacaag atggaagcat caatccactt gccaaagcaca gcag 54

```

```

<210> 128
<211> 323
<212> DNA
<213> Homo sapien

```

```

<400> 128
acctcattag taattgtttt gttgtttcat ttttttctaa tgtctccctc ctaccagctc 60
acctgagata acagaatgaa aatggaagga cagccagatt tctcctttgc tctctgtcca 120
ttctctctga agtctagggt acccattttt gggaccatt ataggcaata aacacagttc 180
ccaagcatt tggacagttt ctgtttgtgt tttagaatgg ttttcccttt tcttagcatt 240
ttcctgcata aggcctcact agtcctctgc ttgctcagtg gactgggctc cccagggcct 300
aggctgcctt cttttccatg tcc 323

```

```

<210> 129
<211> 192
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc feature
<222> (1)...(192)
<223> n = A,T,C or G

```

```

<400> 129
acatacatgt gtgtatatatt ttaaatatca cttttgtatc actctgactt tttagcatat 60
tgaaaacaca ctaacataat tntgtgaac catgatcaga tacaacccaa atcattcatc 120
tagcacattc atctgtgata naaagatagg tgagtttcat ttoccttcag ttggccaatg 180
gataaacaat 192

```

```

<210> 130
<211> 362
<212> DNA
<213> Homo sapien

```

<220>
 <221> misc_feature
 <222> (1)...(362)
 <223> n = A,T,C or G

<400> 130
 ccctttttta tggaatgagt agactgtatg tttgaanatt tanccacaac ctctttgaca 60
 tataatgacg caacaaaaag gtgctgttta gtcctatggt tcagtttatg cccttgacaa 120
 gtttccattg tgttttgccg atctcttggc taatcgtggt atccctccatg ttattagtaa 180
 ttctgtattc cattttgtta acgcctggta gatgtaacct gctangaggc taactttata 240
 ctattttaaa agctcttatt ttgtggtcat taaaatggca atttatgtgc agcaccttat 300
 tgcagcagga agcacgtgtg ggttggttgt aaagctcttt gctaacttta aaaagtaatg 360
 gg 362

<210> 131
 <211> 332
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(332)
 <223> n = A,T,C or G

<400> 131
 cttttgaaa gatcgtgtgc actcctgtgg acatcttgtt ttaatggagt ttccatgca 60
 gtangactgg tatggttgca gctgtccaga taaaacatt tgaagagctc caaaatgaga 120
 gttctccag gtctgcctcg ctgctccaag tctcagcagc agcctctttt aggaggcatc 180
 ttctgaacta gattaaagca gcttgtaaat ctgatgtgat ttggtttatt atccaactaa 240
 cttccatctg ttatcactgg agaaagccca gactcccan gacnggtacg gattgtgggc 300
 atanaaggat tgggtgaagc tggcgttgtg gt 332

<210> 132
 <211> 322
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(322)
 <223> n = A,T,C or G

<400> 132
 acttttgcca ttttgtatat ataaacaatc ttgggacatt ctcttgaaaa ctagggtgac 60
 agtggctaag agaactcgat ttcaagcaat tctgaaggga aaaccagcat gacacagaat 120
 ctcaaatccc caaacagggg ctctgtggga aaaatgaggg aggacctttg tatctcgggt 180
 tttagcaagt taaaatgaan atgacaggaa aggccttatt atcaacaagg agaagagttg 240
 ggatgcttct aaaaaaaact ttggtagaga aaataggaat gctnaatcct aggggaagcct 300
 gtaacaatct acaattgtgc ca 322

<210> 133
 <211> 278
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(278)

<223> n = A,T,C or G

<400> 133

acaagccttc	acaagtttaa	ctaaattggg	attaatcttt	ctgtanttat	ctgcataaatt	60
ctgtgttttc	tttccatctg	gctcctgggt	tgacaatttg	tggaacaac	tctattgcta	120
ctatttataa	aaaatcacia	atctttccct	ttaagctatg	ttnaattcaa	actattcctg	180
ctattcctgt	tttgtcaag	aaattatatt	tttcaaaata	tgtnattttg	tttgatgggt	240
cccacgaac	actaataaaa	accacagaga	ccagcctg			278

<210> 134

<211> 121

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(121)

<223> n = A,T,C or G

<400> 134

gtttanaaaa	ctgttttagc	tcocatagagg	aaagaatggt	aaactttgta	ttttaaaaaa	60
tgattctctg	aggttaaac	tggttttcaa	atgttatitt	tacttgtatt	ttgcttttgg	120
t						121

<210> 135

<211> 350

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(350)

<223> n = A,T,C or G

<400> 135

acttanaacc	atgcctagca	catcagaatc	cctcaaaaga	catcagtata	atcctatacc	60
atancaagtg	gtgactgggt	agcgtgcga	caaaggtcag	ctggcacatt	acttgtgtgc	120
aaacttgata	cttttgtttc	aagtaggaa	tagtatacag	tnoctaggan	tggtactcca	180
gggtgccccc	caactcctgc	agccgtcct	ctgtgccagn	cctgnaaagg	aaactttcgt	240
ccacctcaat	caagccctag	gccatgctac	ctgcaattgg	ctgaacaac	gtttgctgag	300
ttcccaagga	tgcaaacgt	ggtgctcaac	tcctggggcg	tcaactcagt		350

<210> 136

<211> 399

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(399)

<223> n = A,T,C or G

<400> 136

tgtaccgtga	agacgacaga	agttgcatgg	cagggacagg	gcagggccga	ggccagggtt	60
gctgtgattg	tatccgaata	ntoctcgtga	gaaaagataa	tgagatgacg	tgagcagcct	120
gcagacttgt	gtctgccttc	aanaagccag	acaggaaggc	cctgcctgcc	ttggctctga	180
cctggcgccc	agccagccag	ccacaggtgg	gcttctctct	tttgtgtgga	caacnccaag	240
aaaactgcag	aggcccaggg	tcaggtgtna	gtgggtangt	gaccataaaa	caccaggtgc	300

ttccaggaac ccggggcaaaag gccatcccca cctacagcca gcattgccac tggcgtgatg 360
ggtgcagang gatgaagcag ccagntgttc tgctgtggt 399

<210> 137
<211> 165
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(165)
<223> n = A,T,C or G

<400> 137
actggtgtgg tnggggggtga tgctggtggt anaagttgan gtgacttcan gatggtgtgt 60
ggaggaagtg tgtgaacgta gggatgtaga ngtttttggc gtgctaaatg agcttcggga 120
ttggtgtgtc ccactggttg tcaactgtcat tgggtggggt cctgt 165

<210> 138
<211> 338
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(338)
<223> n = A,T,C or G

<400> 138
actcactgga atgccacatt cacaacagaa tcagagggtc gtgaaaacat taatggctcc 60
ttaactcttc cagtaagaat cagggacttg aaatggaaac gttaacagcc acatgcccaa 120
tgctgggcag tctccatgc cttccacagt gaaagggtc gagaaaaac acatccaatg 180
tcattgtgtt ccagccacac caaaaggtgc ttgggtggga gggctggggg catanangtg 240
cangcctcag gaagcctcaa gttccattca gctttgccac tgtacattcc ccatntttaa 300
aaaaactgat gccttttttt tttttttttg taaaattc 338

<210> 139
<211> 382
<212> DNA
<213> Homo sapien

<400> 139
gggaattcttg gtttttggca tctggtttgc ctatagccga ggccactttg acagaacaaa 60
gaaggggact tcagtaaga agtgatttta cagccagcct agtgcccga gtgaaggaga 120
attcaaacag acctcgtcat tctgtgtgtg agcctggtcg gctcaccgcc tatcatctgc 180
atttgcttta ctcaggtgct acoggaactct ggccctgtat gtctgtagt ttacaggatg 240
ccttatttgt cttctacac ccacagggcc cctacttct tcggatgtgt ttttaataat 300
gtcagctatg tgccccatcc tcttcatgc cctcctccc tttctactaca ctgctgagt 360
gcttggaaact tgtttaagt gt 382

<210> 140
<211> 200
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(200)

<223> n = A,T,C or G

<400> 140

acccaaanctt	ctttctgttg	tggtngattt	tactataggg	gttingcttn	ttctaaanatt	60
acttttcatt	taaacancntt	tggttaagtgt	caggctgcac	tttgctccat	anaattattg	120
ttttccacat	tcaacttgta	tggtttgttc	tcttanagca	ttggtgaaat	cacatatttt	180
atattcagca	taaaaggagaa					200

<210> 141

<211> 335

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(335)

<223> n = A,T,C or G

<400> 141

actttatttt	caaaacactc	atatgttgca	aaaaacacat	agaaaaataa	agtttggtgg	60
gggtgtgcac	taaaactcaa	gtcacagact	tttatgtgac	agattggagc	agggtttggt	120
atgcatgtag	agaacccaaa	ctaattttatt	aaacaggata	gaacaggct	gtctgggtga	180
aatggttctg	agaacctc	aattcacctg	tcagatgctg	atanactagc	tcttcagatg	240
ttttctacc	agttcagaga	tnggttaagt	actantcca	atggggaaaa	agcaagatgg	300
attcacaac	caagtaattt	taaacaaaga	cactt			335

<210> 142

<211> 459

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(459)

<223> n = A,T,C or G

<400> 142

accagggttaa	tattgccaca	tatatccttt	ccaattgcgg	gctaacacaga	cgtgtattta	60
gggtgtgttta	aagacaaccc	agcttaatat	caagagaaat	tgtagccttt	catggagtat	120
ctgatggaga	aaacactgag	ttttgacaaa	tctttattta	ttcagatagc	agtcctgatca	180
cacatgggtcc	aacaacactc	aaataataaa	tcaaatatna	tcagatgtta	aagattgggtc	240
ttcaaacatc	atagccaagt	atgcccgcgt	tgcttataat	ctctccgaca	taaaaccaca	300
tcaacacactc	agtggccacc	aaacattcca	gcacagcttc	cttaactgtg	agctgtttga	360
agctaccagt	ctgagacta	ttgactatnt	ttttcangct	ctgaatagct	ctaggggatct	420
cagcanggtg	gggaggaacc	agctcaacct	tggcgtaant			459

<210> 143

<211> 140

<212> DNA

<213> Homo sapien

<400> 143

acatttctct	ccaccaagtc	aggactcctg	gcttctgtgg	gagttcttat	cacctgaggg	60
aaatccaaac	agtcctctct	agaaaggaat	agtgccacca	acccacacca	tctcctgtag	120
accatccgac	ttcctgtgtg					140

<210> 144

<211> 164

```

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(164)
<223> n = A,T,C or G

<400> 144
acttcagtaa caacatacaa taacaacatt aagtgtatat tgccatcttt gtcattttct      60
atctatacca ctctcccttc tgaaaacaan aatcactanc caatcactta tacaattttg      120
aggcaattaa tccatatattg ttttcaataa ggaaaaaaag atgt                          164

<210> 145
<211> 303
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

<400> 145
acgtagacca tccaactttg tatttghtaat ggcaaacatc cagnagcaat tcctaatacaa      60
actggagggt atttataccc aattatccca ttcattaaca tgccctcttc ctgagggtat      120
gcaggacagc tatcataagt cgcccagagc atccagatag taccatttgt ataaacttca      180
gtagggggag ccatccaagt gacaggtcta atcaaaggag gaaatggaac ataaagccag      240
tagtaaaatn ttgcttagct gaaacagcca caaaagactt accgcctggt tgattaccat      300
caa                                                363

<210> 146
<211> 327
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(327)
<223> n = A,T,C or G

<400> 146
actgcagctc aattagaagt ggtctctgac tttcatcanc ttctccctgg gtcctatgac      60
actggcctgg agtgactcat tgctctggtt ggttgagaga gctcctttgc caacaggcct      120
ccaagtcaag gctgggattt gtttcttttc cacattctag caacaatatg ctggccactt      180
cctgaacagg gaggtgggga ggagccagca tggaaacaag tgcccactttc taaagttagc      240
agacttgcgc ctgggcctgt cacacctact gatgaccttc tgtgcctgca ggaatggaatg      300
taggggtgag ctgtgtgact ctatggt                          327

<210> 147
<211> 173
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(173)
<223> n = A,T,C or G

```

<400> 147
 acattgtttt tttagataa agcattgana gagctctcct taacgtgaca caatggaagg 60
 actggaacac ataccacat cttgttctg agggataatt ttctgataaa gtcttgctgt 120
 atattcaagc acatatgtta tatattattc agttccatgt ttatagccta gtt 173

<210> 148
 <211> 477
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(477)
 <223> n = A,T,C or G

<400> 148
 acaaccaatt tatctcatcg aatttttaac ccaaaactcac tcaactgtgcc ttctatacct 60
 atgggataa ttatttgatg ctccatttca tcacacatat atgaataata cactcatact 120
 gcctactac ctggtgcaat aatcacattc ccttccctgc ctgaccctga agccattggg 180
 gtggtcctag tggccatcag tccangcctg caccttgagc ccttgagctc cattgctcac 240
 nccanccac ctacccgacc ccatcctctt acacagctac cctcttgctc tctaaccoca 300
 tagattatnt ccaaatcag tcaattaagt tactattaac actctaccgc acatgtccag 360
 caccactggt aagcctcttc cagccaacac acacacacac acacacatat 420
 ccaggccagc gctacctcat ctccaatc acccctttaa ttacatgct atgggtgg 477

<210> 149
 <211> 207
 <212> DNA
 <213> Homo sapien

<400> 149
 acagttgtat tataatatca agaaataaac ttgcaatgag agcatttaag agggaagaac 60
 taacgtatnt tagagagcca aggaaggttt ctgtggggag tgggatgtaa ggtggggcct 120
 gatgataaat aagagtcagc caggttaagt ggtggtgtgg tatgggcaca gtgaagaaca 180
 tttcaggcag agggaacagc agtgaaa 207

<210> 150
 <211> 111
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(111)
 <223> n = A,T,C or G

<400> 150
 accttgattt cattgtgct ctgatgaaa ccaactatc taatttagct aaaacatggg 60
 cacttaaatg tggtcaggtg ttggacttgt taactantgg catcttggg t 111

<210> 151
 <211> 196
 <212> DNA
 <213> Homo sapien

<400> 151
 agcggcgag gtcattatga acattccaga taactatcat tactcgatgc tgttgataac 60

agcaagatgg	ctttgaactc	agggtcacca	ccagctattg	gaccttacta	tgaaaacccat	120
ggataccaac	cggaaaaccc	ctatcccgca	cagcccaatg	tggtcccccac	tgctctacgag	180
gtgcatccgg	ctcagt					196

<210> 152
 <211> 132
 <212> DNA
 <213> Homo sapien

<400> 152		
acagcacttt	cacatgtaag	aaggagagaa
ttcctaattg	taggagaaag	ataacagaa
cttccccctt	tcatctagt	gtggaaacct
gatgctttat	gttgacagga	atagaaccag
gaggagttt	gt	
		60
		120
		132

<210> 153
 <211> 285
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)... (285)
 <223> n = A,T,C or G

<400> 153		
acaanaccga	nganaggcca	ctggccgtgg
tgctcatdggc	tccaaacatg	aaagtgtcag
cttctgtctt	tatgtctctc	tctgacaact
ctttaccatt	tttatccctg	ctcagcagga
gcacatcaat	aaagtccaaa	gtcttggact
tggccttggc	ttggaggaag	tcatacaac
cctggctagt	gaggggtcgg	cgccgctcct
ggatgacggc	atctgtgaag	tcgtgcacca
gtctgcagcg	cctgtggaag	cgccgtccac
acggagtnag	gaatt	
		60
		120
		180
		240
		285

<210> 154
 <211> 333
 <212> DNA
 <213> Homo sapien

<400> 154		
accacagctc	tggtgggcca	gggcttcagt
accctttctg	tgaanaagcca	tattatcacc
accccaaat	tttctttaa	tatctttaac
tgaaggggtc	agcctcttga	ctgcaagac
cctaagccgg	ttacacagct	aaactccact
ggccctgatt	tgtgaaattg	ctgctgctg
attggcaca	gagtcgaagg	tgcttcagtc
ccctcctccg	tggaaacgaga	ctctgatttg
agtttcacaa	attctcgggc	caactcgtca
ttgtcctct	gaaataaaat	cgggagaatg
gtcaggcctg	tctcatccat	atgtagcttc
cgg		
		60
		120
		180
		240
		300
		333

<210> 155
 <211> 308
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)... (308)
 <223> n = A,T,C or G

<400> 155		
actggaata	ataaaaccca	catcacagtg
ttgtgtcaaa	gatcatcagg	gcatggatgg
gaaagtgtt	tgggaaactgt	aaagtgccta
acacatgac	gatgattttt	gttataatat
ttgaaatcag	gtgcatacaa	actctcctgc
ctgctcctcc	tgggccccag	ccccagcccc
		60
		120
		180

```

atcacagctc actgctctgt tcatccaggc ccagcatgta gtggtgatt cttcttggt 240
gcttttagcc tccanaagtt tctctgaagc caaccaaac tctangtga aggcattgtg 300
gccttggt 308

```

```

<210> 156
<211> 295
<212> DNA
<213> Homo sapien

```

```

<400> 156
accttgctcg gtgcttgga catattagga actcaaaata tgagatgata acagtgccta 60
ttattgatta ctgagagaac tgttagacat ttagttaga attttctaca caggaaactga 120
gaataggaga ttattgttgg cctcatatt ctctctatc ctcttgctc cattctatgt 180
ctaataatt ctcaatcaaa taaggttagc ataatcagga aatcgaccaa ataccaatat 240
aaaaccagat gtctatcctt aagattttca aatagaaaac aaattaacag actat 295

```

```

<210> 157
<211> 126
<212> DNA
<213> Homo sapien

```

```

<400> 157
acaagtttaa atagtgtgt cactgtgcat gtgctgaaat gtgaaatcca ccacatttt 60
gaagacaaa acaattctg tcatgtaatc tctatctgg gtcgtgggta tatctgtccc 120
cttagt 126

```

```

<210> 158
<211> 442
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(442)
<223> n = A,T,C or G

```

```

<400> 158
accactggt ctgggaaca cccatcctta atacgatgat tttctgtcg tgtgaaaatg 60
aanccagcag gctgccocta gtcagtctt cctccagag aaaaagagat ttgagaaagt 120
gcctgggtaa ttcaaccatta atttctccc ccaactctc tgagtctcc cttaattatt 180
ctggtggttc tgaccaaac aggtcatggt ttgttgaca ttgggatcc cagtgaagta 240
natgttga gcctgcata cttagccctt cccacgcaca aacggatgg cagagtgtg 300
ccaacctgt ttcccagtc cacgtagaca gatcacagt gcggaattct ggaagctgga 360
nacagacggg ctctttgcag agccgggact ctgagangga catgagggcc tctgctctg 420
tgttcattct ctgatgtcct gt 442

```

```

<210> 159
<211> 498
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(498)
<223> n = A,T,C or G

```

```

<400> 159
acttcacagt aacgttgttg ttccgttga gcttgaaact atgggtgacg ttgtagggtc 60

```

```

tccaacaaga actgaggttg cagagcgggt agggaaagagt gctgttccag ttgcaectgg 120
gctgctgtgg actgttgttg attcctcact acggcccaag gttgtggaac tggcanaaaag 180
gtgtgtgtgt gganttgagc tcggggcggt gtggtaggtt gtgggctott caacagggggc 240
tgctgtgttg ccgggagtgt aangtgttgt gtcacttgag ctggccagc tctggaagt 300
antanattct tctcgaagtc cagcgttgtt ggagctggca ngggtcantg ttgtgtgtaa 360
cgaaccagtg ctgctgtggg tgggtgtana tctccacaa agcctgaagt tatggtgtcn 420
tcaggtana atgtggttct agtgtccctg ggcngctgtg gaaggttgta nattgtcacc 480
aagggaataa gctgtgtt

```

```

<210> 160
<211> 380
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(380)
<223> n = A,T,C or G

```

```

<400> 160
acctgcaccc agcttccctg ccaaactcac aaggagacat caacctctag acagggaaac 60
agcttcagga tacttccagg agacagagcc accagcagca aaacaaatat tcccattgctt 120
ggagcatggc atagaggaag ctganaaatg tggggtctga ggaagccatt tgagtctggc 180
cactagacat ctcatcagcc acttgtgtga agagatgccc catgacccca gatgcctctc 240
ccacccttac ctccatctca cacacttgag ctttccactc tgtataatto taacatcctg 300
gaqaaaaatg gcagtttgac cgaacctgtt cacaacggta gaggctgatt tctaacgaaa 360
ctgtagaat gaagcctgga 380

```

```

<210> 161
<211> 114
<212> DNA
<213> Homo sapien

```

```

<400> 161
actccacatc ccctctgagc aggcgggtgt cgttcaaggt gtatttggcc ttgctgtca 60
cactgtccac tggcccctta tccacttggt gcttaatccc tcgaaagagc atgt 114

```

```

<210> 162
<211> 177
<212> DNA
<213> Homo sapien

```

```

<400> 162
actttctgaa tcgaatacaa tgatacttag tgtagtttta atactctcat atatatcaaa 60
gtttactac tctgataatt ttgtaaacca ggtaaccaga acatccagtc atacagcttt 120
tggtgatata taacttgca ataaccagct ctggtgatac ataaaactac tcactgt 177

```

```

<210> 163
<211> 137
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(137)
<223> n = A,T,C or G

```

```

<400> 163

```

```

catttataca gacaggcgtg aagacattca cgacaaaaac gcgaaattct atcccgtgac      60
canagaaggc agctacggct actcctacat cctggcgtgg gtggccttgg cctgcacctt      120
catcagcggc atgatgt                                     137

```

```

<210> 164
<211> 469
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(469)
<223> n = A,T,C or G

```

```

<400> 164
cttatcacia tgaatgttct cctgggcagc gttgtgatct ttgccacctt cgtgacttta      60
tgcaatgcac catgctattt catacctaatt gagggagttc caggagattc aaccaggaaa      120
tgcatggatc tc aaaggaaa caaacaccca ataaactcgg agtggcagac tgacaactgt      180
gagacatgca cttgctacga aacagaattt tcatgttgca cctctgtttc tacacctgtg      240
ggttatgaca aagacaactg ccaagaatc ttcaagaagg aggactgcaa gtatatcgtg      300
ggtgagaaga aggacccaaa aaagacctgt tctgtcagtg aatggataat ctaatgtgtc      360
tgtataggcg acagggtccc caggccaggc ctcattctcc tctggcctct aatagtcaat      420
gattgtgtag ccatgcctat cagtaaaaag atntttgagc aaacacttt                    469

```

```

<210> 165
<211> 195
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(195)
<223> n = A,T,C or G

```

```

<400> 165
acagtttttt atatatatcg acattgccgg cacttgtgtt cagtttcata aagctgggtg      60
atccgctgtc atccactatt ccttggttag agtaaaaaat attcttatag cccatgtccc      120
tgacggccgc ccgccgtag ttctcgttcc agtcgtcttg gcacacaggg tgccaggact      180
tctctgaga tgagt                                     195

```

```

<210> 166
<211> 383
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(383)
<223> n = A,T,C or G

```

```

<400> 166
acatcttagt agtgtggcac atcagggggc catcagggtc acagtcactc atagcctcgc      60
cgaggctcga gtccacacca ccggtgttagg tgtgtcctaatt ctgggcttg gcgcccaact      120
ttggagaagg gatatgtctgc acacacatgt ccacaaagcc tgtgaactcg ccaagaattt      180
tttgacagcc agcctgagca aggggcggat gtccagcttc agtcctcctc tcgtcagggt      240
gatgccaaac tegtctangg tccgtgggaa gctgggtgccc acntcaccta caacctgggc      300
gangatctta taaagaggtc ccnagataaa ctccacagaaa cttctctcgg agctgctagt      360
nggggccttt ttggtgaact ttc                                     383

```


<210> 167
 <211> 247
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(247)
 <223> n = A,T,C or G

<400> 167
 acagagccag accttggccaa taaatgaanc agagattaag actaaacccc aagtcanat 60
 tggagcagaa actggagcaa gaagtgggcc tggggctgaa gtagagacca aggccactgc 120
 tatanccata cacagagcca actctcaggc caaggcnatg gttggggcag anccagagac 180
 tcaatctgan tccaaagtgg tggctggaac actggtcatg acanaggcag tgactctgac 240
 tgangtc 247

<210> 168
 <211> 273
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(273)
 <223> n = A,T,C or G

<400> 168
 acttctaaagt ttctcagaag tggaaggatt gtantcatcc tgaatggg tttacttcaa 60
 aatccctcan ccttggtctt cacnactgtc tatactgana gtgctatgtt tccacaaagg 120
 gctgacaact gagcctgnat ttactcatc ccttgagaag cctttccag tagggtgggc 180
 aattcccaac ttcccttgcca caagcttccc aggccttctc ccttggaata ctccagcttg 240
 agtccagat acactcatgt ggtgccctgg gca 273

<210> 169
 <211> 431
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(431)
 <223> n = A,T,C or G

<400> 169
 acagccttgg ctctcccaaa ctccacagtc tcaagtgcaga aagatcatct tccagcagtc 60
 agctcagacc agggtcacaag gatgtgacat caacagtttc tggtttcaga acaggttcta 120
 ctactgtcaa atgacccccc atacttcctc aaaggctgtg gtaagttttg cacaggtgag 180
 ggcagcagaa agggggtant tactgatgga caccatcttc tctgtatact ccacactgac 240
 cttgccatgg gcaaaggccc ctaccacaaa aacaatagga tcactgctgg gcaccagctc 300
 acgcacatca ctgacaaccg ggatggaaaa agaantgcca actttcatc atccaactgg 360
 aaagtgatct gatactgcat tcttaattac ctccaaaagc ttctgggggc catcagctgc 420
 tcgaacatg a 431

<210> 170
 <211> 266
 <212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(266)

<223> n = A,T,C or G

<400> 170

acctgctgggc	tgggctgtta	tgcctgtgcc	ggctgctgaa	agggagtcca	gaggtggagc	60
tcaaggagct	ctgcaggcat	tttgccaanc	ctctccanag	canaggagc	aacctacact	120
ccccgtaga	aagacaccag	attggagtcc	tgggagggg	agtggggtg	ggcatttgat	180
gtatactgt	cacctgaatg	aangagccag	agaggaanga	gacgaanag	anattggcct	240
tcaagctag	gggtctggca	ggtgga				266

<210> 171

<211> 1248

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(1248)

<223> n = A,T,C or G

<400> 171

ggcagccaaa	tcataaacgg	cgaggactgc	agcccgact	cgacgccctg	gcaggcgcca	60
ctggtcatgg	aaaacgaatt	gttctgtctg	ggcgtctctg	tgcattccga	gtgggtgctg	120
tcagccgcac	actgtttcca	gaagtgtgtg	cagagctcct	acaccatcgg	gctgggctgt	180
cacagctctg	aggccgacca	agagccaggg	agccagatgg	tggaggccag	ctctccgcta	240
cgccaccagc	agtacaacag	acccttgcct	gctaaccgac	tcattgtctc	caagttggac	300
gaatccgtgt	ccgagtctga	caccatccgg	agcatcagca	ttgcttcgca	gtgccctacc	360
gcggggaact	cttgctctgt	ttctggctgg	ggtctgctgg	cgaaccggag	aatgcctacc	420
gtgctgcagt	gcgtgaactg	gtcgtgtgtg	tctgaggagg	tctgcagtaa	gctctatgac	480
ccgctgtacc	acccacagcat	gttctgcgcc	ggcggagggg	aagaccagaa	ggactcctgc	540
aacggtgact	ctggggggccc	cctgatctgc	aacgggtact	tgcagggcct	tgtgtctttc	600
ggaaaaagccc	cgtgtggcca	agttggcgtg	ccaggtgtct	acaccaacct	ctgcaaatcc	660
actgagtggg	tagagaaaac	cgccaggccc	agtttaactc	ggggactggg	aaccatgaa	720
tttgaccctcc	aaatacatcc	tggcgaagga	attcaggaat	atctgttccc	agcccctcct	780
ccctcaggcc	caggagtcca	ggccccagc	ccctcctccc	tcaaaccaag	ggtacagact	840
cccagccctc	ctctcctcag	accagaggat	ccagaccctc	cagccctccc	tcctcagac	900
ccaggagtcc	agccccctct	ccctcagacc	caggagtcca	gacccccag	ccctcctccc	960
ctcagaccga	ggggtccagg	cccccaaccc	ctctcctccc	agactcagag	gtccaaagcc	1020
ccaacccntc	attccccaga	cccagaggtc	caggctccag	ccctctntcc	ctcagaccga	1080
gcggtccaat	gccacactaga	ctntcctgtc	acacagtgcc	cccttgctgc	acgttgaccc	1140
aaccttaccg	gttggttttt	cattttntgt	ccctttcccc	tagatccaga	aataaagttt	1200
aagagaagng	caaaaaaaa	aaaaaaaaa	aaaaaaaaa	aaaaaaaaa		1248

<210> 172

<211> 159

<212> PRT

<213> Homo sapien

<220>

<221> VARIANT

<222> (1)...(159)

<223> Xaa = Any Amino Acid

<400> 172

Met Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro
 1 5 10 15
 Leu Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser
 20 25 30
 Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr
 35 40 45
 Ala Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly
 50 55 60
 Arg Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu
 65 70 75 80
 Glu Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe
 85 90 95
 Cys Ala Gly Gly Gln Xaa Gln Xaa Asp Ser Cys Asn Gly Asp Ser
 100 105 110
 Gly Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe
 115 120 125
 Gly Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn
 130 135 140
 Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
 145 150 155

<210> 173

<211> 1265

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(1265)

<223> n = A,T,C or G

<400> 173

ggcagcccgcc	actcgagccc	ctggcaggcg	gcactgggtc	tggaaaaaca	attgttctgc	60
tccggcgctcc	tggtgcatcc	gcagtggggtg	ctgtcagccg	cacactgttt	ccagaactcc	120
tacaccatcg	ggctgggcct	gcacagctct	gaggccgacc	aagagccagg	gagccagatg	180
gtggaggcca	gcctctccgt	acggcaccca	gagtacaaca	gaccttgcct	cgtcaacgac	240
ctcatgtcca	tcaagttgga	cgaatccgtg	tccgagctcg	acaccatccg	gagcatcagc	300
attgcttcgc	agtgccctac	cgccgggaac	tcttgccctg	tttctggctg	gggtctgctg	360
gcgaacgggtg	agctcacggg	tgtgtgtctg	cctctctcaa	ggaggtccct	tgcccagctg	420
cgggggctga	cccagagctc	tgctgccagc	gcagaatgcc	taccgtgctg	cagtgctgga	480
acgtgtccgt	gggtgtcgag	gaggtctgca	gtaagctcta	tgaccocgct	taccacccca	540
gcattgtctg	cgccggcgga	gggcaagacc	agaaggactc	ctgcaacggg	gactctgggg	600
ggccccctgat	ctgcaacggg	tacttgacgg	gccttgtgtc	tttcggaaaa	gccccgtgtg	660
gccaaagtgg	cggtccagggt	gtctacacca	acctctgcaa	attcactgag	tggtatagaga	720
aaaccgtcca	ggccaggttaa	ctctggggag	tgggaaccca	tgaaattgac	ccccaaatac	780
atcctggcga	aggaaattcag	gaatatctgt	tcccagcccc	tgaccocgct	ggcccaggag	840
tccaggcccc	cagccccctc	tccttcaaac	caagggtaca	gatccccagc	ccctctctcc	900
tcagaccagg	gagtcacagc	cccccagccc	ctctctccct	agaccacagg	gtccagcccc	960
tctctcctca	gaccacaggag	tccagacccc	ccagccccct	ctccctcaga	cccagggggt	1020
gaggccccca	acccctctct	cttcagagtc	agaggtccaa	gcccccaacc	cctcgttccc	1080
cagaccacga	ggttnaggtc	ccagccccc	tccctcaga	cccgagnggt	caatgccacc	1140
tagattttcc	ctgnacacag	tgcccccttg	tgngangttg	accacacctt	accagtttgt	1200
ttttcatttt	tngtcccttt	cccctagatc	cagaaataaa	gtttaagaga	ngngcaaaaa	1260
aaaaa						1265

<210> 174

<211> 1459

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)... (1459)

<223> n = A,T,C or G

<400> 174

ggtcagccgc	acactgtttc	cagaagtgcg	tgcagagctc	ctacaccatc	gggctggggc	60
tgcacagctc	tgaggccgac	caagagccag	ggagccagat	gggtggaggc	agcctctccg	120
tacgggaccc	agagtacaa	agacccttgc	tcgctaacga	cctcatgtct	atcaagttgg	180
acggaatccg	gtccagagct	gacacatccc	ggagcatcag	cattgtctcg	cagtgcccta	240
cggcggggaa	ctcttgcttc	gtttctggct	gggtctgctc	ggcgaacggt	gagctcacgg	300
gtgtgtgtct	gcctctctca	aggaggtcct	ctgcccagtc	ggcgggggcg	accocagagc	360
ctgcgtccca	ggcagaatgc	ctaccgtgct	gcagtgcggt	aacgtgtcgg	tggtgtctga	420
ngaggtctgc	antaagctct	atgaccgcct	gtacaccccc	ancatgttct	gcgcccggcg	480
agggaagac	cagaaggact	cctgcaacgt	gagagagggg	aaaggggagg	gcaggcgagc	540
cagggaagg	tggaagaagg	ggagacagag	acacacaggg	cgcgatggcg	agatgcagag	600
atggagagac	acacagggag	acagtacaaa	ctagagagag	aaactgagag	aaacagagaa	660
ataaacacag	gaataaagag	aagcaaaagg	agagagaaac	agaacacagc	atggggaggc	720
agaaacacac	acacatagaa	atgcagttag	ccttccaaca	gcattggggc	tgagggcggt	780
gacctccccc	acaatagaaa	tcctcttata	acttttgact	ccccaaaaac	ctgactagaa	840
atagcctact	gttgacgggg	agccttacc	ataacataaa	tagtcgattt	atgcatacgt	900
ttttatgcat	catgatatac	ctttgttgg	attttttgat	atttctaagc	tacacagttc	960
gtctgtgaat	ttttttaaat	tgttgcaact	ctcctaataa	ttttctgatg	tggtttattga	1020
aaaaatacaa	gtataagtg	actgtgcat	tcaaacacag	gtgttccaag	tcgcactgtg	1080
gtacccagag	gaaacacagt	acacagattc	atagaggtga	aacacagaag	gaaacagaaa	1140
aaatcaagac	tctacaaaag	ggctggggcg	gggtggtcat	gcctgtaact	ccagcacttt	1200
gggaggcgag	gcaggcagat	cacttgaggt	aaggagtcca	agaccagcct	ggccaaaatg	1260
gtgaaatcct	gtctgtacta	aaaatacaaa	agttagctgg	aatgggtggc	aggcgccgtg	1320
aatcccgact	acttggggag	ctgaggcagg	agaattgtct	gaatatggga	ggcagaggtt	1380
gaagtgagtt	gagatcacac	cactatactc	cagctggggc	aacagagtaa	gactctgtct	1440
caaaaaaaaa	aaaaaaaaaa					1459

<210> 175

<211> 1167

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)... (1167)

<223> n = A,T,C or G

<400> 175

ggcagccct	ggcaggcgcc	actggtcatg	gaaaacgaat	tgttctgtc	ggcgctcctg	60
gtgcactccg	agtgggtgct	gtcacccgca	cactgtttcc	agaactccta	caccatcggg	120
ctgggctcgc	acagctctga	ggccgaccaa	gagccagggg	gccagatggt	ggaggccagc	180
ctctccgtac	ggcaccacga	gtacaacaga	ctcttgctcg	ctaacgacct	catgtctcat	240
aagtgtgacg	aatccgtgtc	cgagtctgac	accatccgga	gcatacagct	tgcttcgcag	300
tgccctaccg	cggggaaact	ttgcctogtn	ctgtggtggg	gtctctgtgc	gaacggcaga	360
atgcctaccg	tgtctgaact	cgtgaacgtg	tcggtggtgt	ctgaggangt	ctgcagtaag	420
ctctatgacc	cgtctgacca	ccccagcatg	ttctggcgcc	ggcgagggca	agaccagaa	480
gactctcgca	acggtgactc	tgggggggccc	ctgatctgca	acgggtactt	gcagggcctt	540
gtgtctttcg	gaaaagcccc	gtgtggccaa	cttggcgctc	caggtgtcta	caccaacctc	600
tgcaaatcca	ctgagtggat	agagaaaaac	gtccagacca	gttaactctg	gggactggga	660
accatgaaa	ttgaccccac	ataacatcct	ggggaangaa	tacaggaaat	tcgtgtccca	720
gcccctccct	cctcaggccc	aggagtcacg	gcccacagcc	cctcctccct	caaaccaagg	780

```

gtacagatcc ccagcccttc ctccctcaga cccaggagtc cagacccccc agccctctnt      840
ccntcagacc caggagtcca gccctccttc cntcagacgc aggagtcagc acccccagc      900
ccntcntccg tcagaccacg ggggtcaggc ccccaacccc tcntcntca gagtccagag      960
tccaagcccc caaccctctg ttccccagac ccagaggtn c aggtccagc cctcctccc      1020
tcagaccacg cgttccaatg ccacctagan tntccctgta cacagtgccc ccttggtgga      1080
ngttgaccca accttacccag ttggtttttc attttttgtc cctttccctc agatccagaa      1140
ataaagtnta agagaagcgc aaaaaaa
1167

```

```

<210> 176
<211> 205
<212> PRT
<213> Homo sapien

```

```

<220>
<221> VARIANT
<222> (1)...(205)
<223> Xaa = Any Amino Acid

```

```

<400> 176
Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp
1      5      10      15
Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu
20     25     30
Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val
35     40     45
Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Leu Leu Leu
50     55     60
Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser
65     70     75     80
Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly
85     90     95
Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg Met
100    105    110
Pro Thr Val Leu His Cys Val Asn Val Ser Val Val Ser Glu Xaa Val
115    120    125
Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys Ala
130    135    140
Gly Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly Gly
145    150    155    160
Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly Lys
165    170    175
Ala Pro Cys Gly Gln Leu Gly Val Pro Gly Val Tyr Thr Asn Leu Cys
180    185    190
Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Xaa Ser
195    200    205

```

```

<210> 177
<211> 1119
<212> DNA
<213> Homo sapien

```

```

<400> 177
gcgcactcgc agccctggca ggcggcactg gtcattggaaa acgaattgtt ctgctcgggc      60
gtccgtgtgc atccgcagtg ggtgctgtca gccgcacact gtttcagaa ctcctacacc      120
atcggtgtgc gctgcacag tcttgaggcc gaccaagagc caggagacca gatggtggag      180
gccagcctct ccgtacggca cccagagtac aacagaccct tgctcgctaa cgacctcatg      240
ctcatcaagt tggacgaatc cgtgtccgag tctgacacca tccggagcat cagcattgct      300
tcgcagtgcc ctaccgcggg gaactcttgc ctggtttctg gctggggtct gctggcgagac      360

```

```

gatgctgtga ttgccatcca gtcccagact gtgggaggct gggagtgtga gaagctttcc 420
caaccctggc agggttgtac catttcggca acttcacgtg caaggacgtc ctgctgcac 480
ctcactgggt gctcactact gctcactgca tcaccgggaa cactgtgata aactagccag 540
caccatagtt ctccgaagtc agactatcat gattactgtg ttgactgtgc tgtctattgt 600
actaaccatg ccatgtttta ggtgaaatta gcgtcacctg gctcaacca tcttggtatc 660
cagttatcct cactgaattg agatttcctg cttcagtgct agccattccc acataatttc 720
tgacctacag aggtgaggga tcatatagct ctccaaggat gctggtactc ccctcacaaa 780
ttcattttct ctgtttgtat gaaaggtgct cctctggag cctccagggt tgggtgtgca 840
ggtcacaagt atgaatgtat gatcgtgttc ccattaccca aagcctttaa atccctcatg 900
ctcagtcacac caggggcaggt ctacgatttc ttcatttagt gtatgtgtgc cattcatgca 960
accacctcag gactcctgga ttctctgctc agttgagctc ctgcatgctg cctccttggt 1020
gaggtgaggg agagggccca tggttcaatg ggatctgtgc agttgtaaca cattaggtgc 1080
ttaataaaca gaagctgtga tgttaaaaaa aaaaaaaa 1119

```

```

<210> 178
<211> 164
<212> PRT
<213> Homo sapien

<220>
<221> VARIANT
<222> (1)...(164)
<223> Xaa = Any Amino Acid

```

```

<400> 178
Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp
1 5 10 15
Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu
20 25 30
Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val
35 40 45
Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu Leu
50 55 60
Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Gly Ser Val Ser Glu Ser
65 70 75 80
Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly
85 90 95
Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Asp Ala Val
100 105 110
Ile Ala Ile Gln Ser Xaa Thr Val Gly Gly Trp Glu Cys Glu Lys Leu
115 120 125
Ser Gln Pro Trp Gln Gly Cys Thr Ile Ser Ala Thr Ser Ser Ala Arg
130 135 140
Thr Ser Cys Cys Ile Leu Thr Gly Cys Ser Leu Leu Thr Ala Ser
145 150 155 160
Pro Gly Thr Leu

```

```

<210> 179
<211> 250
<212> DNA
<213> Homo sapien

```

```

<400> 179
ctggagtgcc ttggtgtttc aagcccttgc aggaagcaga atgcaccttc tgaggcacct 60
ccagctgcc ccggcgggg gatgcgaggc tcggagcacc ctggcccggc tgtgattgct 120
gccaggcact gtccatctca gcttttctgt cctttgtctc ccggcaagcg cttctgctga 180
aagttcatat ctggagcctg atgtcttaac gaataaaggc ccatgctccc acccgaaaaa 240

```

aaaaaaaa

250

<210> 180
 <211> 202
 <212> DNA
 <213> Homo sapien

<400> 180
 actagttccag tgtggtggaa ttccattgtg ttgggcccac cacaatggct acctttaaca 60
 tcaccagac ccgcccctg ccctgcccc acgctgctgc taacgacagt atgatgctta 120
 ctctgctact cggaaactat ttttatgtaa ttaatgtatg ctttcttggt tataaatgcc 180
 tgtatttaaa aaaaaaaaaa aa 250

<210> 181
 <211> 558
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(558)
 <223> n = A,T,C or G

<400> 181
 tccytttght naggtttkkg agacacmccck agacctwaan ctgtgtcaca gacttcyngg 60
 aatgttttagg cagtgcctagt aatttcyctg taatgattct gttattactt tcctnattct 120
 ttattctctt ttcttctgaa gattaatgaa gttgaaaatt gaggtggata aatacaaaaa 180
 ggtagtgga tagtataagt atctaagtcg agatgaaaagt gtgttatata tatccattca 240
 aaattatgca agtttagtaat tactcagggt taactaaatt accttaatat gctgttgaaac 300
 ctactctggt ccttggctag aaaaaattat aaacaggact ttgttagttt gggaagccaa 360
 attgataata ttctatgttc taaaagttgg gctatacata aattattaag aaatatggaw 420
 ttttattccc aggaatagg kgttcatttt atgaattata cscrggatag awgtwtgagt 480
 aaaaycagt ttggtwaata ygtwaatatg tcmtaaataa acaakgcttt gactttattc 540
 caaaaaaaa aaaaaaaa 558

<210> 182
 <211> 479
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(479)
 <223> n = A,T,C or G

<400> 182
 acagggtwtk grgatgcta agscccorga rwtggttga tccaacctg gcttwttttc 60
 agaggggaaa atggggccta gaagttagc mscatytagy tgggtcgmtg gcaccocctg 120
 cstcacacag astcccgagt agctgggact acaggcacac agtcactgaa gcaggccctg 180
 ttwgcaattc acgttggccac ctccaaactta aacattcttc atatgtgatg tccttagtca 240
 ctaaggttaa actttcccac ccagaaaagg caacttagat aaatcttag agtactttca 300
 tactmttcta agtctctctc cagcctcact kkgagtctcm cytgggggtt gataggaant 360
 ntctcttggc tttctcaata aartctctat ycatctcatg ttttaatttg tacgcatara 420
 awgtstgata aaatttaaaa gttctggtty mactttaaaa aaaaaaaaaa 479

<210> 183
 <211> 384
 <212> DNA

<213> Homo sapien

<400> 183

aggcgggagc	agaagctaaa	gccaaagccc	aagaagagtg	gcagtgccag	cactggtgcc	60
agtaccagta	ccaataacag	tgccagtgcc	agtgccagca	ccagtggtag	cttcagtgtc	120
ggtgccagcc	tgaccgccac	tctcacattt	gggtctcttc	ctggccttgg	tgagctggtt	180
gccagaccca	gtggcagctc	tggtgcctgt	ggtttctctc	acaagtgaga	ttttagatat	240
tgtaattcct	gccagtcttt	ctcttcaagc	cagggtgcat	cctcagaaac	ctactcaaca	300
cagcactcta	ggcagccact	atcaatcaat	tgaagttgac	actctgcatt	aratctatit	360
gccatttcaa	aaaaaaaaaa	aaaa				384

<210> 184

<211> 496

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(496)

<223> n = A,T,C or G

<400> 184

accgaattgg	gaccgctggc	ttataagcga	tcattgtynt	crrgtatkac	ctcaacgagc	60
agggagattc	agtcctatag	ctgaagaaat	ttgaccogat	gggacaacag	acctgctcag	120
cccattctgc	tcggttctcc	ccagatgaca	aatactctsg	acaccgaatc	accatcaaga	180
aacgcttcaa	gggtctcatg	accagcaaac	cggccctctg	ctctgagggt	tcctctaaac	240
tgatgtcttt	tctgccaact	gttacccttc	ggagactccg	taaccaaaat	cttcggactg	300
tgagccctga	tgcccttttg	ccagccatac	tctttggcat	ccagtctctc	gtggcgattg	360
attatgcttg	tgtagggcaa	tcattggtggc	atcacccata	aagggaacac	atttgacttt	420
tttttctcat	attttaaatt	actacmagaw	tattwmagaw	waaatgawtt	gaaaaactst	480
taaaaaaaaa	aaaaaa					496

<210> 185

<211> 384

<212> DNA

<213> Homo sapien

<400> 185

gctggtagcc	tatggcgkgg	cccacggagg	ggctctctag	gccacggcac	agtgacttcc	60
caagtatcty	gcgcsgcgtc	ttctaccgtc	cctacctgca	gatcttcggg	cagattcccc	120
aggagagcat	ggacgtggcc	ctcatggagg	acagacaact	ytctctggag	cccgctctct	180
gggcacaccc	tcctggggcc	caggcgggca	ctcggtcttc	ccagtatgcc	aactggctgg	240
tggtgctgct	ctctgctctc	ttctgctctg	tgcccaacat	ctgctggttc	aacttgctca	300
ttgccatggt	cagttacaca	ttcgccaaag	tacaggggca	cagcgatctc	tactgggaag	360
gcgcagcgtt	accgcctcat	ccgg				384

<210> 186

<211> 577

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(577)

<223> n = A,T,C or G

<400> 186

gagttagctc	ctccacaacc	ttgatgaggt	cgtctgcagt	ggcctctcgc	ttcataccgc	60
------------	------------	------------	------------	------------	------------	----

tnccatcgctc	atactgtagc	tttgcaccca	cyctctggca	tcttggggcg	gcntaatatt	120
ccaggaaact	ctcaatcaag	tcaccgtoga	tgaacacctgt	gggctgggtc	tgtcttccgc	180
tcgggtgtgaa	aggatctccc	agaaggagtg	ctcgatcttc	cccacacttt	tgatgacttt	240
attgagtcga	ttctcatgt	ccagcaggag	gttgtaccag	ctctctgaca	gtgaggtcac	300
cagccctatc	atgccgttga	mcgtgccgaa	garaccggag	cctttgtgtg	gggkxgaagt	360
ctcaccocaga	ttctgcatca	ccagagagcc	gtggcaaaag	acattgacaa	actcggccag	420
gtggaaaaag	amcamctcct	ggargtgctn	gcgcgtcttc	gtcmgttggt	ggcagcgctw	480
tctctttgac	acacaaaaca	gttaaaggca	ttttcagccc	ccagaaantt	gtcatcatcc	540
aagatntcgc	acagcactna	tccagttggg	attaataa			577

<210> 187

<211> 534

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(534)

<223> n = A,T,C or G

<400> 187

aacatcttcc	tgtataatgc	tgtgtaatat	cgatccgatn	ttgtctgstg	agaatycatw	60
actkggaaaa	gmaacattaa	agcctggaca	cttggtattaa	aattcacaat	atgcaacact	120
ttaaacagtg	tgtcaatctg	ctcccyynac	tttgtcatca	ccagctctggg	aakaagggtga	180
tgccctattc	acacctgtta	aaaggggcgt	aagcattttt	gattcaacat	cttttttttt	240
gacacaagtc	cgaaaaaagc	aaaagtaaac	agttatyaat	ttgttagcca	attcactttc	300
ttcatgggac	agagccatyt	gatttaaaaa	gcaaatgtca	taatatgtag	cttyggggagc	360
tgatatttga	gcgggaagtg	agcctttcta	cttcaccaga	cacaactccc	tttcatattg	420
ggatgttnac	naaagtwatg	tctctwacag	atgggatgct	tttgtggcaa	ttctgtcttg	480
aggatctccc	agttttattta	ccacttgcac	aagaaggcgt	tttcttctcc	aggc	534

<210> 188

<211> 761

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(761)

<223> n = A,T,C or G

<400> 188

agaaaccagt	atctctnaaa	acaacctctc	ataccttgtg	gacctaattt	tgtgtgcgtg	60
tgtgtgtgctg	cgcatatttat	atagacagcc	acatcttttt	tacttttgta	aaagcttatg	120
ccctcttgtt	atctatatct	gtgaaagttt	taatgatctg	ccataatgtc	ttggggacct	180
ttgtctctct	tgtaaatggt	actagagaaa	acacctatnt	tatgagtcac	tctagttngt	240
tttattcgac	atgaaggaaa	tttcagatn	acaacactna	caaaactctcc	ctkgackarg	300
ggggacaaaag	aaaagcaaaa	ctgamcataa	raaacaatwa	cctggtgaga	arttgcataa	360
acagaaatwr	ggtagtatat	tgaarnacag	catcattaaa	rmgttwtktt	wttctccctt	420
gcaaaaaaca	tgtacnagct	tccggttgag	taatgccaa	ttgttttttt	tatnatataa	480
cttgccctctc	attacatggt	tnaaagtgg	gtgggtggcc	aaaaatttga	aatgatggaa	540
ctgactgata	aagctgtaca	aataagcagt	gtgcctaaac	agcaacacag	taatgttgac	600
atgctctaatt	cacaaatgct	aatttcatta	taaatgtttg	ctaaaaatac	ctttgaacta	660
ttttctgtgn	ttcccagagc	tgagatntta	gattttttgt	agtatnaagt	gaaaaantac	720
gaaaaataata	acattgaa	aaaaananaa	aaaaaaaana	a		761

<210> 189

<211> 482

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(482)

<223> n = A,T,C or G

<400> 189

tttttttttt	tttgccgatt	ctactatttt	attgcaggan	gtgggggtgt	atgcaccgca	60
caccgggct	atnagaagca	agaaggaagg	agggaggcca	cagccccttg	ctgagcaaca	120
aagccgctgt	ctgcctcttc	tgctgtgtct	ctgggtcagg	cacatgggga	gacottcccc	180
aaggcagggg	ccaccagctc	aggggtggga	atacaggggg	tgggngtgt	gcataagaag	240
tgataggcac	aggccaccgc	gtacagaccc	ctcggtctct	gacaggtnga	tttcgaccag	300
gtcattgtgc	octgcocagg	cacagcgtan	atctggaaaa	gacagaatgc	tttccttttc	360
aaatttggtc	ngtcatngaa	ngggcanttt	tccaantng	gctnggtctt	ggtaacnctg	420
gttcggccca	gtctcncgtc	caaaaantat	tcaccnncct	ccnaattgct	tgcnngnccc	480
cc						482

<210> 190

<211> 471

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(471)

<223> n = A,T,C or G

<400> 190

tttttttttt	ttttaaaaca	gtttttcaca	acaaaattta	ttagaagaat	agtgggtttg	60
aaaactctcg	catccagtga	gaactaccat	acaccacatt	acagctngga	atgtntctcca	120
aatgtctcgt	caaagtatac	aatggaacca	ttcaatctta	cacatgcacg	aaagaacaag	180
cgcttttgac	atacaatgca	caaaaaaaaa	aggggggggg	gaccacatgg	attaaaattt	240
taagtactca	tcacatacat	taagacacag	ttctagtcca	gtcnaaaatc	agaactgcnt	300
tgaaaaattt	catgtatgca	atccaaccaa	agaacttnat	tgggtgatcat	gantnctcta	360
ctacatcnac	cttgcattct	gccaggaacn	aaaagttnaa	ancacnngt	acaaaaanaa	420
tctgtaattn	anttcaacct	ccgtacngaa	aaatntnnnt	tatacctcc	c	471

<210> 191

<211> 402

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(402)

<223> n = A,T,C or G

<400> 191

gagggattga	aggtctgttc	tastgtcggm	ctgttcagcc	accaactcta	acaagttgct	60
gtcttccaact	cactgtctgt	aagcttttta	accagacwg	tatcttcoata	aatagaacaa	120
attcttcacc	agtcacatct	cttaggacct	ttttggattc	agttagtata	agctcttcca	180
ctctcttgtt	taagacttca	tctggtaaag	tcttaagttt	tgtagaagg	aattyaattg	240
ctcgttctct	aacaatgtcc	tctccttgaa	gtatttggct	gaacaaccca	cctaaagtcc	300
ctttgtgcat	ccattttaaa	tatacttaat	agggcattgk	tnactagggt	taaatctctg	360
aagagtcato	tgtctgcmaa	agttgcgtta	gtatatctgc	ca		402

<210> 192
 <211> 601
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(601)
 <223> n = A,T,C or G

<400> 192
 gagtcggat ccaataactt ttgtctgagg gcagcacaca tatncagtgc catggnaact 60
 ggctacccc acatgggagc agcatgcggt agntatataa ggctattccc tgagtccagac 120
 atgctyittt gaytaccgtg tgccaagtgc tgggtattct yaacacacyt ccatcccygt 180
 ctttttgtga aaaactggca cttktctgga actagcarga catcacttac aaattcacc 240
 acgagacact tgaagggtgt acaaaagcga ytccttgcat gctttttgtc cctccggcac 300
 cagttgtcaa tactaacccg ctggtttgcc tccatcacat ttgtgatctg tagctctgga 360
 tacatctctc gacagtactg aagaactctt tcttttgttt caaaagcarg tcttggtgcc 420
 tgttggtatca ggttccattt tcccagtcy g aatgttcaaa tggcatattt wacttccacc 480
 aaaacattgc gatttgaggc tcagcaacag caaatcctgt tccggcattg gctgcgaagg 540
 cctcgatgta gccggccagc gccaaaggcag ggcgcgtgag cccaccagc agcagaagca 600
 g 601

<210> 193
 <211> 608
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(608)
 <223> n = A,T,C or G

<400> 193
 atacagccca natcccacca cgaagatgct cttgttgact gagaacctga tgcggtcact 60
 ggtcccgtg tagcccccagc gactctccac ctgctggaag cggttgatgc tgcactcytt 120
 cccaagcag gcagmagcgg gscgggtcaa tgaactccay tctgtgcttg ggtkgacgg 180
 tkaagtgcag gaagagcgtg accacctcgc ggctccaccg gatgcccgac tgtgcgggac 240
 ctgacgcgaa actcctcgat ggctcatgagc gggaagcgaa tgagcccgag ggccttgccc 300
 agaaccttcc gcctgttctc tggcgtaacc tgcagctgct gccgctgaca ctgcgctcgc 360
 gaccagcgga caaacggcrt tgaacagccg cacctcacgg atgccagtg tgcgcgctc 420
 caggammgsc accagcggtg ccagggtcaat gtcggtgaag cctccggcgg gtrattgggt 480
 ctgcagtggt ttgtgcgatg ttctccagcg acaggtggc cagctggcgt tcactgaaga 540
 gtcgcgctg cgtgagcagc atgaaggcgt tgcggtcgc cagttctctt tcaggaactc 600
 cagcgaat 608

<210> 194
 <211> 392
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(392)
 <223> n = A,T,C or G

<400> 194
 gaacggctgg accttgcttc gcatgtgtgt tgctggcagg gaataccttg gcaagcagyt 60

```

ccagtcgag cagccccaga ccgctgccgc ccgaagctaa gcoctgcctct ggcocttcccc 120
tcgcgctcaa tgcagaacca gtagtgggag cactgtgttt agagtaaga gtgaacactg 180
tttgatttta ctgtgggaatt tcctctgttta tatagctttt cccaatgata atttcccaaac 240
aacaacaaca aaataaacatg ttgtgcctgtt aagttgtata aaagtaggtg attctgtatt 300
taaagaaaaa attactgttta catatactgc ttgcaatttc tgtatttatt gktnctstgg 360
aaataaatat agttattaaa ggttgtcant cc 392

```

<210> 195

<211> 502

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(502)

<223> n = A,T,C or G

<400> 195

```

ccsttkgagg ggtkaggkyc cagttycga gtggaagaaa caggccagga gaagtgcgtg 60
ccgagctgag gcagatgttc ccacagtgc cccagagacc stgggstata gtytctgacc 120
cctcncaaagg aaagaccacs ttctggggac atgggctgga gggcaggacc tagaggcacc 180
aagggaaggc cccattccgg ggstgttccc cgaggaggaa gggaaggggc tctgtgtgcc 240
ccccagaggg aagaggccct gagtctctgg atcagacacc ccttcacgtg tatccccaca 300
caaatgcaag ctccaccaag tcccctctca gtccccttcc stacaccctg amcgccacc 360
gscacacacc caccagagac acgcccaccg ccatggggar tgtgtctcaag gartcgcnng 420
gcrcgtgga catctngtgc cagaaggggg cagaatctcc aatagangga ctgarcmatt 480
gctnanaaaa aaaaaanaaa aa 502

```

<210> 196

<211> 665

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(665)

<223> n = A,T,C or G

<400> 196

```

ggttaactgg ttctattgcc accacttagt ggatgtcatt tagaaccatt ttgtctgtct 60
cctotggaag ccttgcgcag agcggaactt gtaattgttg gagaataact gctgaatttt 120
wagctgtttk gagttgatts gcaccactgc acccacaact tcaatatgaa aacyawttga 180
actwatittat tatcttgtga aaagtataac aatgaaaatt ttgttcatac tgtattkacc 240
aagtatgatg aaaaagcaawa gatataatatt cttttattat gttaaattat gatggccatt 300
attaatcggc aaaaatgtgga gtgtatgttc ttttcacagt aatatatgcc ttttgttaact 360
tcacttgggtt attttattgt aatgarta caaaattctt aatttaagar aatggatagt 420
watatttatt tcatttaattt ctttctkgt ttaoctgwaat ttgaaaaga wtgcattgat 480
tcttgacaga aatcgatctt gatgctgtgg aagtagtttg acccacatcc ctatgagttt 540
ttcttagaat gtataaaggt ttagcccat cnaacttcaa agaaaaaaat gaccacatac 600
tttgcaatca ggctgaaatg tggcatgctn ttctaattcc aactttataa actagcaaan 660
aagtg 665

```

<210> 197

<211> 492

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature
 <222> (1)...(492)
 <223> n = A,T,C or G

<400> 197

ttttnttttt	ttttttttgc	aggaaggatt	ccattttattg	tggatgcatt	ttcacaatat	60
atgtttattg	gagcgatcca	ttatcagtga	aaagtatcaa	gtgtttataa	nattttttagg	120
aaggcagatt	cacagaacat	gctngtcngc	ttgcagtttt	acctcgtana	gatnacagag	180
aattatagtc	naaccagtaa	acnaggaatt	tacttttcaa	aagattaaat	ccaaactgaa	240
caaaattcta	cctgaaact	tactccatcc	aaatattgga	ataanaagta	gcagtgtatc	300
attctctctt	gaactttaga	ttttctagaa	aaatatgtaa	tagtgatcag	gaagagctct	360
tgttcaaaaag	tacaacnaag	caatgttccc	ttaccatagg	cottaatcca	aactttgatc	420
catttcactc	ccatcacggg	agtcattgct	acctggggaca	cttgatattt	gttcatnctg	480
ancntggctt	aa					492

<210> 198
 <211> 478
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(478)
 <223> n = A,T,C or G

<400> 198

ttntttttgn	atttcantct	gtannaanta	ttttcattat	gtttattana	aaaatatnaa	60
tgntttccacn	acaaatcatn	ttacntnagt	aagaggccan	ctacattgta	caacatacac	120
tgagtatat	ttgaaaagga	caagtttaaa	gtanacncat	attgcccganc	atanacacatt	180
tatacatggc	ttgatgtgata	tttagcacag	canaaaactga	gtgagttaac	agaaanaaat	240
natatatgtc	aatcngattt	aagatacaaa	acagatcccta	tgggtacatan	catcctntag	300
gagttgtggc	tttatgttta	ctgaaagtca	atgcagttcc	tgtacaaga	gatggccgta	360
agcattctag	tacctctact	ccatggttaa	gaatcgtaca	cttatgttta	catatgtntca	420
gggtaagaat	tgtgttaagt	naanttatgg	agaggtccan	gagaaaaatt	tgatncaa	478

<210> 199
 <211> 482
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(482)
 <223> n = A,T,C or G

<400> 199

agtgacttgt	cctccaacaa	aaccocctga	tcaagtttgt	ggcactgaca	atcagacctta	60
tgctagtctc	tgctactctat	tcgctactaa	atgcagactg	gagggggacca	aaaaggggca	120
tcaactccag	ctggattatt	ttggagcctg	caaactctatt	cctactttgta	cggactttgta	180
agtgattccag	tttccctctac	ggatgagaga	ctggctcaag	aatatcccta	tgcagctttta	240
tgaagccnac	tctgaacacg	ctgggttatct	nagatgagaa	ncagagaaaat	aaagtcnaga	300
aaattttacct	ggangaaaaag	aggcttttngg	ctgggggacca	tccatttgaa	ccttctctta	360
anggacttta	agaanaaaact	accacatgtn	tgtngtatcc	tgggtccnng	ccgtttantg	420
aaentngacn	ncacccttnt	ggaatanant	cttgacngcn	tcttgaactt	gtctcctctgc	480
ga						482

<210> 200
 <211> 270

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(270)
<223> n = A,T,C or G

<400> 200
cgccgcaag tgcaactcca gctggggccg tgcggacgaa gattctgcc gacgttggtc 60
cgactgcgac gacggcggcg gcgacagtcg caggtgcagc gcgggcgcct ggggtcttgc 120
aaggtcgagc tgacgccgca gaggtcgtgt cactgccac gaccttgacg cgtcgggga 180
cagccggaac agagcccggt gaangcggga ggcctcgggg agccctcgg gaagggcggc 240
ccgagagata cgaggtgca ggtggccgcc 270

<210> 201
<211> 419
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(419)
<223> n = A,T,C or G

<400> 201
tttttttttt ttttggatc tactgcgagc acagcaggtc agcaacaagt ttattttgca 60
gctagcaagg taacagggtta gggcatgggt acatgttcag gtcaacttcc ttgtcgttgg 120
ttgattggtt tgtctttatg gggcgggggt ggggttaggg aaancgaagc anaantaaca 180
tggagtgggt gcaacctccc tgtagaacct ggttacnaaa gcttggggca gttcaactgg 240
tctgtgacgc tcattttctt gacaatcaat ttattagaag tcaggatata ttttagagag 300
tccactgtnt ctggaggagg attaggggtt cttgccanaa tccaancaa atccacntga 360
aaaagtggga tgatncangt acngaatacc ganggcatan ttctcatant cgttggcca 419

<210> 202
<211> 509
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(509)
<223> n = A,T,C or G

<400> 202
tttntttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 60
tggcaacttaa tccattttta ttcaaaaatg tctacaaant ttnaatncnc cattatacng 120
gtnatgttnc aaaatctaaa nnttattcoa atntnagcca aantccttac ncaaatnnaa 180
tacnncnaaa aaacaaaaat ataentntct ttcagcaaac ttngttacat aaataaaaaa 240
aatatatacg gctggtgttt tcaaggtaca attatcttaa cactgcaaac atnttttnaa 300
ggaactaaaa taaaaaaaaa cactnccgca aaggttaaag ggaacaacaa attcntttta 360
caacancnnc nattataaaa atcatatctc aaatcttagg ggaatatata cttcacacng 420
ggatcttaac ttttactnca cttgttttat ttttttanaa ccatgtnttt gggccaaca 480
caatggnaat nccnccnccncc ggaactag 509

<210> 203
<211> 583
<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(583)

<223> n = A,T,C or G

<400> 203

tttttttttt	ttttttttga	cccccctctt	ataaaaaaca	agttaccatt	ttattttact	60
tacacatatt	tattttataa	ttggtattag	atattcaaaa	ggcagctttt	aaaatcaaac	120
taaatggaaa	ctgccttaga	tacataattc	ttaggaatta	gcttaaaaatc	tgcttaaaagt	180
gaaatcttct	ctctagctctt	ttgactgtaa	atttttgact	cttgtaaaaac	atccaaattc	240
attttctttg	cttttaaaat	tatctaactc	ttccattttt	tcctatttcc	aagtcaattt	300
gcttctctag	cctcatttcc	tagctcttat	ctactattag	taagtggctt	ttttctaaa	360
agggaaaaca	ggaagagana	atggcacaca	aaacaaacat	tttatattca	tatttctacc	420
tacgttaata	aaatagcatt	ttgtgaagcc	agctcaaaag	aaggcttaga	tccttttatg	480
tcacttttag	tcactaaacg	atatcnaaag	tgccagaatg	caaaaggttt	gtgaacattt	540
attcaaaagc	taataaaga	tatttcacat	actcatcttt	ctg		583

<210> 204

<211> 589

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(589)

<223> n = A,T,C or G

<400> 204

ttttttttnt	tttttttttt	tttttttctc	ttcttttttt	ttganaatga	ggatcgagtt	60
tttactcttc	tagatagggc	atgaagaaaa	ctcatctttc	cagctttaaa	ataacaatca	120
aatctcttat	gctatatcat	atttttaagt	aaactaatga	gtcactggct	tatcttctcc	180
tgaaggaaat	ctgttctattc	ttctcattca	tatagttata	tcaagtacta	ccttgcata	240
tgagagggtt	ttcttctcta	tttacacata	tatttccatg	tgaatttgta	tcaaaccttt	300
attttcatgc	aaactagaaa	ataatgtntt	cttttgcata	agagaagaga	acaatatnag	360
cattcaaaaa	ctgcctcaaat	tgtttggtta	gnttatccat	tataattagt	tnggcaggag	420
ctaatcaaaa	tcacattttac	ngacnagcaa	taataaaact	gaagtaccag	ttaaatatcc	480
aaaataatta	aaggaacatt	tttagcctgg	gtataattag	ctaattcact	ttacaagcat	540
ttatnagaa	tgaattcaca	tgttattatt	cctagcccca	acacaatgy		589

<210> 205

<211> 545

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(545)

<223> n = A,T,C or G

<400> 205

tttttttttt	ttttttcagt	aataatcaga	acaatattta	tttttatatt	taaaattcat	60
agaaaagtgc	cttacattta	ataaaagtgt	gtttctcaaa	gtgatcagag	gaattagata	120
tngtcttgaa	caccaatatt	aatttgagga	aaatacacca	aaatacatata	agtaaatatt	180
ttaagatcat	agagctttga	agtgaaaaga	taaaatttga	cctcagaaac	cttgagcatt	240
aaaaatccac	tattagcaaa	taaattacta	tggacttctt	gcttttaatt	tgtgatgaat	300
atgggggtgc	actggtaaac	caacacattc	tgaaggatac	attacttagt	gatagattct	360

```

tatgtacttt gctanatnac gtggatatga gttgacaagt ttctctttct tcaatctttt 420
aaggggcnaga ngaaatgagg aagaaaaagaa aaggattacg catactgttc ttctctatngg 480
aaggattaga tatgtttcct ttgccaatat taaaaaata ataattgtta ctactagtga 540
aacc 545

```

<210> 206

<211> 487

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(487)

<223> n = A,T,C or G

<400> 206

```

ttttttttt ttttttagtc aagtttctna tttttattat aattaaagtc ttggtcattt 60
catttattag ctctgcaact tacatattta aattaagaa acgttnttag acaactgtna 120
caattttata atgtaagggt ccattattga gtanatatat tcttccaaga gtggatgtgt 180
cccttctccc accaactaat gaancagcaa cattagttaa attttattag tagatnatac 240
actgtctcaa acgtaatttc tcttctccat ccccatgtng atattgtgta tatgtgtgag 300
ttggttnagaa tgcatacnca atctnacaat caacagcaag atgaagctag gcntgggctt 360
tcggtgaaaa tagactgtgt ctgtctgaat caaatgatct gacctatcct cgggtggcag 420
aactcttcga accgcttctc caaaggcngc tgccacattt gtggcctctn ttgcacttgt 480
ttcaaaa 487

```

<210> 207

<211> 332

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(332)

<223> n = A,T,C or G

<400> 207

```

tgaattggct aaaagactgc atttttanaa ctagcaactc ttatttcttt cotttaaaaa 60
tacatagcat taaatcccaa atcctattta aagactgcac agcttgagaa ggtcactact 120
gcatttatag gacottctgg tggttctgct gttacntttg aantctgaca atccttgana 180
atcctttgat gcagaggagg taaaaggatg tggattttca cagaggaana acacagcgca 240
gaaatgaagg ggccaggctt actgagcttg tccactggag ggtcatggg tgggacatgg 300
aaaagaaggc agcctaggcc ctggggagcc ca 332

```

<210> 208

<211> 524

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(524)

<223> n = A,T,C or G

<400> 208

```

agggcgtggt gcggaggggc ttactgtttt gtctcagtaa caataaatac aaaagactg 60
gtgtgttcc ggcccctacc aaccacgaag ttgattttct ttgtgtgcag agtgactgat 120
tttaaggac atggagcttg tcacaatgct acaatgtcac agtgtgaagg gcacactcac 180

```


tcccgcgtga	ttcacattha	gcaaccaaca	atagctcatg	agtcataact	tgtaaaact	240
ttggcagaa	tactnttga	aacttgca	tgataactaa	gatccaagat	atttcccaaa	300
gtaaatagaa	gtgggtcata	atattaatta	cctgttcaca	tcaggttcca	tttacaagtc	360
atgagccag	acactgacat	caaactaagc	ccacttagac	tcctcaccac	cagtcgtgcc	420
tgtcatcaga	caggaggctg	tcaccttgac	caaattctca	ccagtcgaatc	atctatccaa	480
aaaccattac	ctgatccact	tcgggtaatg	caccaccttg	gtga		524

<210> 209

<211> 159

<212> DNA

<213> Homo sapien

<400> 209

gggtgaggaa	atccagagtt	gccatggaga	aaattccagt	gtcagcatte	ttgctccttg	60
tggccctctc	ctacactctg	gccagagata	ccacagtcga	acctggagcc	aaaaaggaca	120
caaaggactc	tcgacccaaa	ctgccccaga	ccctctcca			159

<210> 210

<211> 256

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(256)

<223> n = A,T,C or G

<400> 210

actccctggc	agacaaaggc	agaggagaga	gctctgttag	ttctgtgttg	ttgaactgcc	60
actgaatttc	tttccacttg	gactattaca	tgccanttga	gggactaatg	gaaaaacgta	120
tggggagatt	ttanccaatt	tangtntgtg	aatggggaga	ctggggcagg	cgggagagat	180
ttgcagggtg	naaatgggan	ggctggtttg	ttanatgaac	agggacatag	gaggtaggca	240
ccaggatgct	aaatca					256

<210> 211

<211> 264

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(264)

<223> n = A,T,C or G

<400> 211

acattgtttt	tttgagataa	agcattgaga	gagctctcct	taacgtgaca	caatggaag	60
actggaacac	ataccacac	ctttgttctg	agggataatt	ttctgataaa	gtcttgctgt	120
atattcaagc	acatatgtta	tatatatttc	agttccatgt	ttatagcccta	gttaaggaga	180
ggggagatgc	attcngaaag	aggactgaaa	gaaatactca	agtnngaaaa	cagaaaaaga	240
aaaaaggag	caaatgagaa	gcct				264

<210> 212

<211> 328

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(328)

<223> n = A,T,C or G

<400> 212

acccaaaaat	ccaatgctga	atatttggct	tcattattcc	canattcttt	gattgtcaaa	60
ggatttaagt	ttgtctcagc	ttgggcactt	cagttaggac	ctaaggatgc	cagccggcag	120
gtttatatat	gcagcaacaa	tattcaagcg	cgacaacagg	ttattgaact	tgcccgccag	180
ttnaatttca	ttcccatatga	cttgggatcc	ttatcatcag	ccagagagat	tgaaaattta	240
ccctacnac	tctttactct	ctgganaggg	ccagtgggtg	tagctataag	cttggccaca	300
tttttttttc	ctttattctc	ttgtcaga				328

<210> 213

<211> 250

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(250)

<223> n = A,T,C or G

<400> 213

acttatgagc	agagcgacat	atccnagtgt	agactgaata	aaactgaatt	ctctccagtt	60
taagacattg	ctcactgaag	ggatagaagt	gactgccagg	agggaaagta	agccaaaggc	120
cattatgcc	aagganatat	acatttcaat	tctccaaact	tcttctcat	tccaagagtt	180
ttcaatat	gcatgaacct	gctgataanc	catgttaana	aacaaatc	tctctnac	240
tctcatcggt						250

<210> 214

<211> 444

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(444)

<223> n = A,T,C or G

<400> 214

accocagaatc	caatgtcgaa	tatttggctt	cattattccc	agattctttg	attgtcaaa	60
gattttaagt	tgtctcagct	tgggcacttc	agttaggacc	taaggatgcc	agccggcagg	120
tttatatatg	cagcaacaat	attcaagcgc	gacaacaggt	tattgaactt	gcccggccagt	180
tgaatttcat	tcctcattgac	ttgggatcct	tatcatcagc	canagagatt	gaaaatttac	240
ccctacgact	ctttactctc	tggagagggc	cagtgggtgt	agctataagc	ttggccacat	300
tttttttttc	ttttactcct	tgtcagagat	gcgattcacc	catatgctan	aaaccaacag	360
agtgactttt	acaaaattcc	tataganatt	gtgaataaaa	ccttacctat	agttgcccatt	420
acttgtctct	ccctaataata	cctc				444

<210> 215

<211> 366

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(366)

<223> n = A,T,C or G

```

<400> 215
acttatgagc agagcgacat atccaagtgt anactgaata aaactgaatt ctctccagtt      60
taaagcattg ctcactgaag ggatagaagt gactgccagg agggaaagta agccaaggct      120
cattatgcc aagganatat acatttcaat tctccaaact tcttctctcat tccaagagtt      180
ttcaaatatt gcatgaacct gctgataagc catgttgaga aacaaatata tctctgaact      240
tctcatcggt aagcagaggg tgtaggcaac atggaccata gcgaanaaaa aacttagtaa      300
tccaagctgt tttctacact gtaaccaggt ttccaaccaa ggtgggaaatc tcctatactt      360
ggtgcc

```

<210> 216

<211> 260

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(260)

<223> n = A,T,C or G

```

<400> 216
ctgtataaac agaactccac tgcangaggg agggccgggc caggagaatc tccgcttgtc      60
caagacaggg ggcctaaggag ggtctccaca ctgctnntaa gggcctntnc atttttttat      120
taataaaaaa tnaaaaaggc ctcttctcaa cttttttccc ttnggctgga aaatttaaaa      180
atcaataaatt tctnaagtt ntcaagctat catatatact ntatctcgaa aaagcaacat      240
aattcttctt tccctccttt

```

<210> 217

<211> 262

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(262)

<223> n = A,T,C or G

```

<400> 217
acctacgtgg gtaagtttan aaatgttata atttcaggaa naggaacgca tataattgta      60
tcttgcttat gaatttctat ttaataagg aaatagcaaa ttggggtggg gggaatgtag      120
ggcattctac agtttgagca aaatgcaatt aaatgtggaa ggacagcact gaaaaatttt      180
atgaaataatc tgtatgatta tatgtctcta gagtagattt ataattagcc acttaccta      240
atatccttca tgcttgtaaa gt

```

<210> 218

<211> 205

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(205)

<223> n = A,T,C or G

```

<400> 218
accaaggtgg tgcattaccg gaantggatc aangacacca tegtggccaa cccctgagca      60
cccctatcaa ctcccttttg tagtaaaactt ggaacottgg aaatgaccag gccaaagactc      120
aggcctcccc agttctactg acctttgtcc ttangntnna ngtcagggtt tgetagggaaa      180
anaaatcagc agacacaggt gtaaa

```

<210> 219
 <211> 114
 <212> DNA
 <213> Homo sapien

<400> 219
 tactgttttg tctcagtaac aataaatata aaaagactgg ttgtgttcg gcccatcca 60
 accacgaagt tgatttctct tgtgtgcaga gtgactgatt ttaaaggaca tgga 114

<210> 220
 <211> 93
 <212> DNA
 <213> Homo sapien

<400> 220
 actagccagc acaaaagcca gggtagcctg aattgctttc tgctctttac atttctttta 60
 aaataagcat ttagtgctca gtccttactg agt 93

<210> 221
 <211> 167
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(167)
 <223> n = A,T,C or G

<400> 221
 actangtgca ggtgcgcaca aatatttgtc gatattccct tcatcttgga ttccatgagg 60
 tcttttgccc agcctgtggc tctactgtag taagtctctg ctgatgagga gccagnatgc 120
 cccccactac cttccctgac gtcgccana aatcacccaa cctctgt 167

<210> 222
 <211> 351
 <212> DNA
 <213> Homo sapien

<400> 222
 agggcggtgt gggggggcg gtactgacct cattagtagg aggatgcatt ctggcacc 60
 gttcttcacc tgtcccccaa tccttaaaag gccatactgc ataaagtc aaacagataa 120
 atgtttgtcg aattaaggga tggatgaaaa aaattaataa tgaatttttg cataatccaa 180
 tttctctctt tatatttcta gaagaagttt ctttgagcct attagatccc gggaatcttt 240
 taggtgagca tgattagaga gcttgtaggt tgctttttaca tatatctggc atatttgagt 300
 ctgatatcaa aacaatagat tggtaaaggt ggtattattg tattgataag t 351

<210> 223
 <211> 383
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(383)
 <223> n = A,T,C or G

<400> 223

aaaaaaaaca	aacaaaaaaa	acaattcttc	attcagaaaa	attatcttag	ggactgatat	60
tggttaattat	ggtcaatttta	atwrttttt	ggggcatttc	cttacattgt	cttgacaaga	120
ttaaaaatgct	tggtccaaaa	ttttgtattt	tatttggaga	cttcttatca	aaagtaatgc	180
tgccaaagga	agtctaagga	attagttagt	ttccmctac	ttgtttggag	tggtgctattc	240
taaaagattt	tgatttctct	gaatgacaat	tatatattaa	ctttggtggg	ggaaaanagt	300
ataggaccac	agtcctcact	tctgatactt	gtaaaattaat	cttttattgc	acttgttttt	360
accattaaag	tatatgttta	aaa				383

<210> 224

<211> 320

<212> DNA

<213> Homo sapien

<400> 224

ccctgaagg	cttcttgta	gaaaatagta	cagttacaac	caataggaac	aacaaaaaga	60
aaaagtgtt	gacattgtag	tagggagtg	gtacccctta	ctcccatca	aaaaaataat	120
ggatcatatg	gtaaagtaga	raagggaac	attttatcat	atgttctaaa	agagaagaa	180
ggaataatc	tactttctc	aaatgggaac	ctttaaaggt	gctttgatac	tgaaagacac	240
aaatgtggcc	gtccatctc	ctttaraggt	gcagtacttg	gacacggtaa	ctgttgcatg	300
tttaractcm	gcattgtgac					320

<210> 225

<211> 1214

<212> DNA

<213> Homo sapien

<400> 225

gaggactgca	gcccgactc	gcagccctgg	caggcggcac	tggtcatgga	aaacgaattg	60
ttctgctgg	ggctcctgg	gcacccgcag	tggtgtctgt	cagccgcaca	ctgtttccag	120
aactctctca	ccatcgggtg	gggctgcac	agtccttgag	ccgacacaaga	gccaggaggc	180
cagatgggtg	aggccagcct	ctccgtacgg	caccagagat	acaacagacc	cttgctcgct	240
aacgacctca	tgctcatcaa	gttggacgaa	tcctgtctcg	agtcctgacac	catccgggagc	300
atcagcattg	cttcgcagtg	ccctaccggg	gggaactctt	gcctcgtttc	tggtgtgggt	360
ctgctggcga	acggcagaat	gcctaccgtg	ctgcagtgcg	tgaactgtgc	gggtgtgtct	420
gaggaggctc	gcagtaagct	ctatgaccgg	ctgtaccacc	ccagcatgtt	ctgcgcgggc	480
ggaggggca	accagaagga	ctcctgcaac	gggtgactctg	gggggccctc	gatctgcaac	540
gggtacttgc	aggcctctgt	gtctttcgga	aaagccctgt	gtggccaaat	tggtgtgcca	600
gggtgtctca	ccaactctct	caaatcact	gagtggaatg	agaaaaacctg	ccaggccagt	660
taactctggg	gactgggaac	ccatgaaatt	gaaccccaaa	tacatcctgc	ggaaggaatt	720
cagggaatcc	tggtcccgac	ccctcctccc	tcaggcccaag	gagtcacaggc	ccccagccccc	780
tcctccctca	aaccaagggt	acagatcccc	agccctcctc	ccctcagacc	caggagcca	840
gacccccagc	ccctcctccc	ctcagaccga	ggagtcacag	ccctcctccc	tcagaccagc	900
gagtcacagc	ccccagccgc	ctcctcctcc	agacccaggg	gtccaggccc	ccacccctcc	960
ctccctcaga	ctcagaggtc	caagccccca	acccctcctt	ccccagacc	agaggtccag	1020
gtccagccgc	ctcctcctcc	agacccagcg	gtccaatgcc	acctagactc	tcctgtgaca	1080
cagtcgcccc	ttgtggcagc	ttgacccaac	cttacaggtt	ggtttttcct	ttttgtccc	1140
tttccctcag	atccagaatt	aaagtctaag	agaagcgcaa	aaaaaaaaaa	aaaaaaaaaa	1200
aaaaaaaaaa	aaaa					1214

<210> 226

<211> 119

<212> DNA

<213> Homo sapien

<400> 226

accagtatg	tgacgggaga	cggaacccca	tgtagacgcc	cactccacca	gggttcccaa	60
agaacctggc	ccagctataa	tcattcatcc	tgacagtgcc	aataatcagc	ataaccagt	119

<210> 227
 <211> 818
 <212> DNA
 <213> Homo sapien

<400> 227

acaattcata	gggacgacca	atgaggacag	ggaatgaacc	cggtctctcc	ccagccctga	60
tttttctcat	atatggggtc	ccttttcatt	ctttgcaaaa	acactggggt	ttctgagAAC	120
acggacgggt	cttagcaca	tttgtgaaat	ctgtgtaraa	ccgggctttg	caggggagat	180
aattttctct	ctctggagga	aagtggtgga	ttgacaggca	gggagacagt	gacaaggcta	240
gagaaagcca	cgctcgccct	ctctggaacc	aggatggaac	ggcagacccc	tgaaaacgaa	300
gcttgtccccc	ttccaatcag	ccactcttga	gaacccccat	ctaacttctc	actggaaaag	360
agggcctcct	caggagcagt	ccaagagttt	tcaaaagata	cgtagacaact	accatctaga	420
ggaaaaggtg	caccctcagc	agagaagccg	agagcttaac	tctggtcggt	tccagagaca	480
acctgctggc	tgctctggga	tgccgccacg	ctttgagagg	ccactacccc	atgaacttct	540
gccatccact	ggacatgaag	ctgaggacac	tgggcttcaa	cactgagttg	tcagtgaagg	600
gacaggctct	gcctccaagc	cggtgagggg	cagcaaccac	tctctctccc	ttctctcagc	660
aaagccattc	ccacaatatc	agaccatacc	atgaagcaac	gagacccaac	cagtttggct	720
caagaggata	tgaggactgt	ctcagcctgg	ctttgggctg	acaccatgca	cacacacaa	780
gtccactctc	aggttttccg	cctagatggg	agtcggtg			818

<210> 228
 <211> 744
 <212> DNA
 <213> Homo sapien

<400> 228

actggagaca	ctgttgaact	tgatcaagac	ccagaccacc	ccaggtctcc	ttcgtgggat	60
gtcatgacgt	ttgacatacc	tttggaaaca	gcctcctcct	tggaagatgg	aagaccgtgt	120
tcgtggccga	cctggccctc	cctggccctg	ttcttaagat	gcggagtcaac	atttcaatgg	180
taggaaaagt	ggcttcgtaa	aatagaagag	cagtcaactg	ggaactacca	aatggcgaga	240
tgctcgggtg	acattggggg	gctttgggat	aaaagattta	tgagccaact	attctctggc	300
accagattct	aggccagttt	gttccactga	agctttttcc	acagcagtc	acctctgcag	360
gctggcagct	gaatggcttg	ccgtgggctc	tgtggcaaga	tcacactgag	atcgatgggt	420
gagaaggcta	ggatgcttgt	ctagtgttct	tagctgtcac	gttggtcctc	tccagtttgg	480
ccagacgggt	ttggccactc	ccttctaaaa	cacaggcgcc	ctcctgtgtg	cagtgaaccgc	540
ccgtggatag	ccttggccca	ttccagcagt	cccagttatg	catttcaagt	ttggggtttg	600
ttcttttctg	taattgtctc	ctgtgtgtgc	agctgtcttc	atttctctgg	ctaagcagca	660
ttgggagatg	tggaaccagag	atccactcct	taagaaccag	tgggcaaaaa	cactttcttt	720
cttcaactctg	aagttagctgg	tggt				744

<210> 229
 <211> 300
 <212> DNA
 <213> Homo sapien

<400> 229

cgagtctggg	ttttgtctat	aaagtgtgat	ccctcctttt	ctcatccaaa	tcagtgaac	60
cattacacat	cgaaataaaa	gaaaggtggc	agacttggcc	aaagccaggc	tgacatgtgc	120
tcaggagttg	ttgtttttta	attattattg	ttagaaacgt	cacccacagt	ccctgttaat	180
ttgtatgtga	cagccaactc	tgagaaggtc	ctatttttcc	acctgcagag	gatccagttc	240
cactaggctc	ctccttggcc	tcacactgga	gtctccggca	gtgtgggtgc	ccactgacat	300

<210> 230
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 230
cagcagaaca aatacaaat tgaagagtg c aagatctca taaatctat gctgaggaat 60
gagcgacagt tcaaggagga gaagcttgca gagcagctca agcaagctga ggagctcagg 120
caatataaag tcttggttca cactcaggaa cgagagctga cccagtttag ggagaggtg 180
cggaagggga gagatgcctc cctctcattg aatgagcatc tccaggccct cctcactccg 240
gatgaaccgg acaagtccca ggggcaggac ctccaagaaa cagacctcgg ccgcgaccac 300
g 301

<210> 231
<211> 301
<212> DNA
<213> Homo sapien

<400> 231
gcaagcacgc tggcaaatct ctgtcaggtc agctccagag aagccattag tcatatttagc 60
caggaactcc aagtcacat ccttgccaac tggggacttg cgcaggttag ccttgaggat 120
ggcaacacgg gacttctcat caggaaagtg gatgtagatg agctgatcaa gacgccagg 180
tctgaggatg gcaggatcaa tgatgtcagg cgggttggtg ccgccaatga tgaacacatt 240
tttttttggg gacatgccat ccatttctgt caggatctgg ttgatgactc ggtcagcagc 300
c 301

<210> 232
<211> 301
<212> DNA
<213> Homo sapien

<400> 232
agtaggtatt tctgtagaag ttcaacacca aaactggaac atagttctcc ttcaagtgtt 60
ggcgacagcg gggcttctcg attctggaat ataactttgt gtaaatcaac agccacctat 120
agaagagtc atctgtctgt aaggagagac agagaactct ggggttcctgc gtcctgtcca 180
cgtgctgtac caagtgtcgg tgccagcctg ttacctgttc tcactgaaaa tctggctaatt 240
gctcttctgt atcacttctg attctgacaa tcaatcaatc aatggcctag agcactgact 300
g 301

<210> 233
<211> 301
<212> DNA
<213> Homo sapien

<400> 233
atgactgact tcccagtaag gctctctaag gggtaagtag gaggatccac aggatttgag 60
atgctaaggc cccagagatc gtttgatcca accctcttat ttccagaggg gaataatggg 120
cctagaagtt acagagcatc tagctggtgc gctggcacc cttggcctcac acagactccc 180
gagtagctgg gactacagcg acacagtcac tgaagcagcg cctgttagca attctatgag 240
tacaataatc catgagatga gtagagactt tattgagaaa gcaagagaaa atccatcaaa 300
c 301

<210> 234
<211> 301
<212> DNA
<213> Homo sapien

<400> 234
aggctctaca catcgagact catccatgat tgatatgaat ttaaaaatta caagcaaga 60
cattttatc atcatgatgc ttctttttgt ttctctttt cgttttcttc tttttctttt 120
tcaatttcag caacatactt ctcaatttct tcaggattta aaactcttag ggattgatct 180
cgctctatga cagcaagttc aatgtttttg ccacctgact gaaccacttc caggagtgc 240
ttgatcacca gcttaattgt cagatcatct gcttcaatg cttcgtcagt atagtcttctc 300

t		301
<210>	235	
<211>	283	
<212>	DNA	
<213>	Homo sapien	
<400>	235	
tggggcgtgtg	catcaggcgg	gtttgagaaa
aattccctca	tcttttaggg	aatcatttac
tgctttcact	aagtgtctcg	aacttctgtc
atgttatctt	tgaactgatg	ctcataggag
ttagggattc	aaagaaatat	tagatttaag
		ctcacactgg
		tca
		60
		120
		180
		240
		283
<210>	236	
<211>	301	
<212>	DNA	
<213>	Homo sapien	
<400>	236	
aggtcctcca	ccaactgcct	gaagcacggt
aatactttta	aatcgatcag	atttccttaa
tcggagcagc	atcattaata	ccaagcagaa
tggttagacg	gcttcactag	tacagtgtac
aagcatcgtg	taccagtcat	aaagcatcaa
a		tactcgacat
		gaacgaatat
		aaagacacc
		300
		301
<210>	237	
<211>	301	
<212>	DNA	
<213>	Homo sapien	
<400>	237	
cagtggtagt	ggtggtggac	gtggcggttg
actcaatttt	tgctcgctcc	tttttggcct
ccttggtcaa	tgccctcatg	taggagtcct
ttgggtagt	ggtgccaagc	tcgtcaatgg
gggttcgaa	attctttctt	cctttggata
t		atgtagtcca
		tatccattcc
		ctcctttatc
		60
		120
		180
		240
		300
		301
<210>	238	
<211>	301	
<212>	DNA	
<213>	Homo sapien	
<400>	238	
gggcaggttt	tttttttttt	ttttttgatg
gttcacagtt	cagcccccctg	ctcagaaaaac
ccttgagact	tcggagtgctg	aggctctcca
acccctgcc	tggaagcag	ctccctgggg
gtgtgggacc	cagggtctgt	tcttcacagt
t		aggaggtgga
		agggatgact
		aatttcttta
		60
		120
		180
		240
		300
		301
<210>	239	
<211>	239	
<212>	DNA	
<213>	Homo sapien	

<400> 239
 ataagcagct agggaaattct ttatttagta atgtcctaac ataaaaagttc acataactgc 60
 ttctgtcaaa ccatgatact gagctttgtg acaaccocaga aataactaag agaaggcaaa 120
 cataatacct tagagatcaa gaaacattta cacagttcaa ctgttataaa atagctcaac 180
 attcagccag tgagttaggt gtgaatgcc gcatcacag tatcacggct cttcaggga 239

<210> 240
 <211> 300
 <212> DNA
 <213> Homo sapien

<400> 240
 ggtcctaag aagcagcagc ttccacattt taacgcaggt ttacgggtgat actgtccttt 60
 gggatctgc ctccagtgga accttttaag gaagaagtgg gcccaagcta agttccacat 120
 gctgggtgag ccagatgact tctgttccct ggtcactttc ttcaatgggg cgaatggggg 180
 ctgccaggtt tttaaaatca tgcttcatct tgaagcacac ggctacttca cctctctcac 240
 gctgtgggtg tactttgatg aaaataccca ctttgttggc ctttctgaag ctataatgtc 300

<210> 241
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 241
 gaggtctggt gctgaggtct ctgggctagg aagaggagtt ctgtggagct ggaagccaga 60
 cctctttgga ggaaactcca gcagctatgt tgggtgtctt gaggggaatgc aacaaggctg 120
 ctctccatg tattggaaaa ctgcaaacct gactcaactg gaagggaagt ctgctgccag 180
 tgtgaagaac cagcctgagg tgacagaaac ggaagcaaac aggaacagcg agtcttttct 240
 tctctctct gtcatacggg ctctctcaag catcctttgt tgtcaggggc ctaaaaggga 300
 g 301

<210> 242
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 242
 ccgaggtcct gggatgcaac caatcactct gtttcacgtg acttttatca ccatacaatt 60
 tgtggcattt cctcatttct tacattgtag aatcaagagt gtaataaat gtatatcgat 120
 gtcttcaaga atatattatt cctttttcac tagaaccat tcaaatata agtcaagaat 180
 cttaatatca acaaatatat caagcaaac ggaaggcaga ataactacca taatttagta 240
 taagtacca aagttttata aatcaaaagc cctaagtata accattttta gaattcaatc 300
 a 301

<210> 243
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 243
 aggttaagtcc cagtttgaag ctcaaaagat ctggtatgag cataggctca tcgacgacat 60
 ggtggcccaa gctatgaaat cagaggaggg cttcatctgg gctgtaaaa actatgatgg 120
 tgacgtgcag tcggactctg tggcccaagg gtatggctct ctccgcatga tgaccagcgt 180
 gctggtttgt ccagatggca agacagtga agcagaggct gccacggga ctgtaaccgc 240
 tcaactccgc atgttccaga aaggacagga gacgtccacc aatccattg cttccatttt 300
 t 301

<210> 244

<211> 300
 <212> DNA
 <213> Homo sapien

<400> 244
 gctgggttgc aagaatgaaa tgaatgattc tacagctagg acttaacctt gaaatggaaa 60
 gtcactgcaat cccatttgcg ggcctgtctc gtgcacatgc ctctgtagag agcagcattc 120
 ccaggggacct tggaaacagt tgacactgta aggtgcttgc tccccaagac acatcctaaa 180
 aggtgttgta atggtgaaaa cgtcttcctt ctttattgcc cctcttattt tatgtgaaca 240
 actgtttgtc ttttgtgtat cttttttaa ctgtaaagtt caattgtgaa aatgaatatc 300

<210> 245
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 245
 gtctgagtat ttaaaatggt attgaaatta tccccaacca atgttagaaa agaaaaggtt 60
 tatatactta gataaaaaat gagggtgaatt actatccatt gaaatcatgc tcttagaatt 120
 aaggccaggga gatattgtca ttaattgtara cttcaggaca ctgagtata gcagccctat 180
 gttttcaag agcagagatg caattaaata ttgtttgaca tcaaaaaggc cactcaatc 240
 agctaataa atgaagagcc taatttctaa agcaattctt tataatttac aagtttttaa 300
 g 301

<210> 246
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 246
 ggtctgtcct acaatgcctg cttcttgaaa gaagtcggca ctttctagaa tagctaataa 60
 acctgggctt attttaaaga actatttcta gctcagattg gtttctctat ggctaaaata 120
 agtgcttctt gtgaaaatta aataaaacag ttaattcaaa gccttgata atgttaccac 180
 taacaatcat actaaatata ttttgaagta caaagtttga catgctctaa atgacacacc 240
 caaatgtgct ttacaaaaca cgttcttaac aaggtatgct ttacactacc aatgcagaaa 300
 c 301

<210> 247
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 247
 aggtcctttg gcagggtcca tggatcagag ctcaaaactg agggaaaggc atttcgggta 60
 gcctaagagg gcgactggcg gcagcacaac caaggaaaggc aaggttggtt cccccagct 120
 gtgtcctgtg ttcagggtcg acacacaatc ctcattggaa caggatcacc catgcgctgc 180
 ccttgatgat caaggttggg gcttaagtgg attaagggag gcaagttctg ggttctctgc 240
 cttttcaaac catgaagtcg gcctctgtat ccctcctttt cctaactgat attctaacta 300
 a 301

<210> 248
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 248
 aggtccttgg agatgccatt tcagccgaag gactctctw ttccgaagta caccctcact 60
 attaggaaga ttcttagggg taatttttct gaggaaggag aactagccaa cttagaat 120

acagggaagaa agtgggtttgg aagacagcca aagaaataaa agcagattaa attgtatcag 180
 gtacattcca gctgtttggc aactccataa aaacatttca gattttaatc ccgaatttag 240
 ctaatgagac tggatttttg ttttttatgt tgtgtgtcgc agagctaaaa actcagtccc 300
 c 301

<210> 249
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 249
 gtccagaggga agcacctcgt gctgaactag gcttgccctg ctgtgaactt gcacttggag 60
 ccctgacgct gctgtttccc ccgaaaaacc cgaccgacct ccgcgatctc cgtcccggcc 120
 ccaggagagc acagcagtga ctacagagctg gtgcacacct gtgcctccct cctcacccgc 180
 catcgtaatg aattattttg aaaattaatt ccaccatcct ttcagattct ggatggaaag 240
 actgaatcct tgactcagaa ttgtttgctg aaaaagaatga tgtgactttc ttagtcat 300
 a 301

<210> 250
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 250
 ggtctgtgac aaggacttgc aggcgtgtgg aggcaagtga cccctaaccac tacacttctc 60
 cttatcttta ttggcttgat aaacataatt atttctaaca ctagcttatt tccagttggc 120
 cataagcaca ctagtacttt tctctggctg gaatagtaaa ctaagtatg gtacatctac 180
 ctaaaagact actatgtgga ataatacata ctaatgaagt attacatgat ttaagaacta 240
 caataaaacc aaacatgctt ataacattaa gaaaaacaat aaagatcacat gattgaaacc 300
 a 301

<210> 251
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 251
 gccgaggtcc tacattttgc ccagtttccc cctgcactcc ctccagggcc cctgcctcat 60
 agacaacctc atagagcata ggagaactgg ttgccctggg gccaggggga ctgtctggat 120
 gccaggggct ctaaaaaatg ccactgtcac tgccaggaaa tgctctcgag cagtacacct 180
 cattgggagc atgaagaagc ttcaagaaat cttcaggctc actctcttga aggcccgaaa 240
 cctctggagg ggggcagtg aatcccagct ccaggacgga tctctgcgaa aagatatcct 300
 c 301

<210> 252
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 252
 gcaaccaatc actctgttcc acgtgacttt tatcaccata caatttggg catttccotca 60
 ttttctacat tgtagaatca agagtgtaaa taaatgtata tcatgtctt caagaatata 120
 tcatctcttt ttcaactagga acccattcaa aatataagtc aagaatctta atatcaacaa 180
 atatatacag caaactggaa ggcagaataa ctaccataat ttagtataag taccacaaagt 240
 tttataaatc aaaagcccta atgataacca tttttagaat tcaatcatca ctgtagaatc 300
 a 301

<210> 253

<211> 301
 <212> DNA
 <213> Homo sapien

<400> 253

```

ttcctaaga agatgttatt ttgttgggtt ttgttcccc tccatctcga ttctcgtacc      60
caactaataa aaaaaataa agaaaaaatg tgctgggttc tgaataataa ctctttagct      120
tggtctgatt gttttcagac cttaaaatat aaacttgttt cacaagcttt aatccatgtg      180
gatttttttt cttagagaac cacaaaacat aaaaggagca agtcggactg aatacctgtt      240
tccatagtcg ccacagggtg ttctcaccat ttctccata ggaaatgtct ttttccaag      300
g                                                                                   301

```

<210> 254
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 254

```

cgctgcgctt ttcccttggg ggaggggcaa ggccagaggg ggtccaagtg cagcacgagg      60
aacttgacca attcccttga agcgggtggg ttaaaccctg taaatgggaa caaaatcccc      120
ccaaatctct tcactctaac ctgttggaact cctgactgta gaattttttg gttgaaacaa      180
gaaaaaataa agacttttga cttttcaagg ttgcttaaca ggtactgaaa gaactggcctc      240
acttaaaactg agccaggaaa agctgcagat ttattaatgg gtgtgttagt gtgcagtgcg      300
t                                                                                   301

```

<210> 255
 <211> 302
 <212> DNA
 <213> Homo sapien

<400> 255

```

agcttttttt tttttttttt tttttttttt ttcattaaaa aatagtgtctc tttattataa      60
attactgaaa tggttctttt ctgaataata atataaatat gtgcaaagtt tgacttggat      120
tgggattttt ttgagttctt caagcatctc ctaataccct caagggcctg agtagggggg      180
aggaaaaaag actggagggt gaatctttat aaaaaacaag agtgatttag gcagattgta      240
aacattatta aaaaacaaga aaaaaacaaa aaaatagaga aaaaaaccac cccaacacac      300
aa                                                                                   302

```

<210> 256
 <211> 301
 <212> DNA
 <213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(301)

<223> n = A,T,C or G

<400> 256

```

gttcagaaa acattgaagg tggttccca aagtctaaact agggataccg cctctagcct      60
aggacccctc tccccacacc tcaatccacc aaaccatcca taatgcaccc agataggccc      120
acccccaaaa gcttgggacac cttaggcaca cagttagtgc caggacagac tcactcttat      180
aggcaaatag ctgctggcaa actggcatta cctggtttgt ggggatgggg ggcgaagtgt      240
gtggcctctc ggcctgttta gcaagaacat tcagggtagg cctaagttaa tcgtgttagt      300
t                                                                                   301

```

<210> 257
 <211> 301

<212> DNA

<213> Homo sapien

<400> 257

gttgtaggagg aactctggct tgctcattaa gtcctactga ttttcactat cccctgaatt	60
tccccactta tttttgtctt tcaactatcgc aggccttaga agaggtctac ctgcctccag	120
tcttacctag tccaggtctac cccctggagt tagaatggcc atcctgaagt gaaaagtaat	180
gtcacattac tcccttcagt gattttctgt agaagtgcca atccctgaat gccaccaaga	240
tcttaattct cacatcttta atcttatctc ttggactcct ctttacaccg gagaaggctc	300
c	301

<210> 258

<211> 301

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(301)

<223> n = A,T,C or G

<400> 258

cagcagtagt agatgcgcta tgccagcacg cccagcactc ccaggatcac caccagcacc	60
agggggcccag ccaccaggcg cagaagcaag ataaacagta ggctcaagac cagagccacc	120
ccaggggcaaa caagaaacca ataccaggac tgggcaaaat cttcaaaagt cttaacctg	180
atgtctcggg cattgagggt gtcaataana cgctgatccc ctgctgtatg gtgggtgcat	240
tggtgatccc tgggagcgcc ggtggagtaa cgttggtcca tggaaagcag cgccacaac	300
t	301

<210> 259

<211> 301

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(301)

<223> n = A,T,C or G

<400> 259

tcatatatgc aaacaatgc agactangcc tcaggcagag actaaaggac atctcttggg	60
gtgtcctgaa gtgatttga cccctgaggg cagacaccta agtaggaatc ccagtgggaa	120
gcaaaagccat aaggaagccc aggatttcct gtgatcagga agtggggcag gaaggtctgt	180
tccagctcac atctcatctg catgcagcac ggaccggatg cgccactggt gtcttggctt	240
ccctcccatc ttctcaagca gtgtccttgt tgagccattt gcatccttgg ctccagggtg	300
c	301

<210> 260

<211> 301

<212> DNA

<213> Homo sapien

<400> 260

ttttttttct ccctaaggaa aaagaaggaa caagtctcat aaaaccaaat aagcaatggt	60
aaggtgtctt aactgaaaa agattaggag tcaactggttt acaagttata attgaatgaa	120
agaactgtaa cagccacagt tggccatttc atgccaatgg cagcaaaaca caggattaac	180
tagggcaaaa taaataaagt tgtggaagcc ctgataagtg cttataaac agactgattc	240
actgagacat cagtacctgc ccgggcggcc gctcgagcgc aattctgcag atatccatca	300

c 301

<210> 261
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 261

aaatattcga gcaaatccgtg taactaatgt gctctccataa aaggctttga actcagtgaa	60
tctgcttcca tccacgattc tagcaatgac ctctcggaca tcaaaagctcc tottaagggtt	120
agcaccsaact attccataca attcatcagc aggaataaaa ggctcttcag aagggttcaat	180
ggcgacatcc aattttctct gataatttag attcctcaca acccttccctg ttaagtgaag	240
ggcatgatga tcatccaag ccagtggtc acttactcca gactttctgc aatgaagatc	300
a	301

<210> 262
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 262

gagagagacc tggtacagca tttgtaagca cagaatactc caggagtatt tgtaattgtc	60
tgtgagcttc ttgccgcaag tctctcagaa atttaaaaag atgcaaatcc ctgagtcacc	120
cctagacttc ctaaacacaga tctctgggg ctggaacctg gcactctgca tttgtaatga	180
gggctttctg gtgcacacct aattttgtgc attcttgcgc taaatcctgg attagtgccc	240
catcattacc cccacattat aatgggatag attcagagca gatactctcc agcaaaagaa	300
c	301

<210> 263
 <211> 301
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(301)
 <223> n = A,T,C or G

<400> 263

tttagcttgt ggtaaatgac tcacaaaact gattttaaaa tcaagttaat gtgaattttg	60
aaaattacta cttaaatccta attcacacata acaatggcat taaggtttga ctgagttgg	120
ttcttagtat tattttatggt aaataggctc ttaccacttg caaataactg gccacatcat	180
taatgactga cttccacagta aggcctccta aggggtaagt angaggatcc acaggatttg	240
agatgctaag gccccagaga tcggttgatc caaccctctt attttcagag gggaaaatgg	300
g	301

<210> 264
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 264

aaagacgtta aaccactcta ctaccacttg tggaaactctc aaagggtaaa tgacaaascc	60
aatgaatgac tctaaaaaca atattttacat ttaatgggtt gtgacaata aaaaaacaa	120
gtggatagat ctagaatttgt aacatttttaa gaaaaccata scattttgaca gatgagaaa	180
ctcaattata gatgcaaatg tataactaaa ctactatagt agtaagagaa tacattttcc	240
acccttcata taaattcact atcttggtt gaggcactcc ataaaatgta tcacgtgcac	300
a	301

<210> 265
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 265
 tgcccaagtt atgtgtaagt gtatccgcac ccagaggtaa aactacactg tcattcttgt 60
 cttcttgtga cgcagtatatt cttctctggg gagaagccgg gaagtcttct cctggctcta 120
 catattcttg gaagtctcta atcaactttt gttccatttg tttcatttct tcaggaggga 180
 ttttcagttt gtcaacatgt tctctaacca caattgccca tttctgtaaa gaatccaaag 240
 cagtccaagg cttgacatg tcaacaacca gcataactag agtatcttc agagatacgg 300
 c 301

<210> 266
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 266
 taccgtctgc cttctctccc atccaggcca tctgcgaatc tacatgggtc ctcttattcg 60
 acaccagatc actctttctct ctaccacag gcttgctatg agcaagagac acaacctctc 120
 ctcttctgtg ttccagcttc ttttctgtt cttccaccoc ctttaagtct attcctgggg 180
 atagagacac caatacccat aacctctctc ctaagctcc ttataaccca gggcgacag 240
 cacagactcc tgacaactgg taaggccaat gaactgggag ctacacagctg gctgtgctg 300
 a 301

<210> 267
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 267
 aaagagcaca ggccagctca gctgcccctg gccatctaga ctacagcctg ctccatgggg 60
 gttctcagtg ctgagtcctc ccaggaaaag ctacactaga cttctgagg ctgaatcttc 120
 atcctcacag gcagctcttg agagcctgat attcctagcc ttgattggtc ggagtaaagc 180
 ctattctga ttctctctct tcttttcttt caagttggct ttctctcac ctctctgttc 240
 aattcgcctc agcttgtctg ctttagccct catttccaga agcttctctc ctttggcatc 300
 t 301

<210> 268
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 268
 aatgtctcac tcaactactt cccagcctac cgtggcctaa ttctgggagt tttcttctta 60
 gatctgggga gagctgggtc ttctaaggag aaggagggaag gacagatgta actttggatc 120
 tcgaagagga agtctaattg aagtaattag tcaacggctc ttgttttagc tcttggaa 180
 tgctgggtgg ctcaagtggc ccttttgagg aaagcaagta ttattcttaa ggagtaacca 240
 ctccaccattg ttctactttc taccatcacc aattgtatat tatgtattct ttggagaact 300
 a 301

<210> 269
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 269
 taacaatata cactagctat ctttttaact gtccatcatt agcaccaatg aagattcaat 60
 aaaattacct ttatttcacac atctcaaaac aattctgcaa attcttagtg aagtttaact 120
 atagtcacag acccttaataa ttccatctgt tttctatgtc tactgaaaat aagttcacta 180
 cttttctgga tattctgttac aaaatcttat taaaattcct ggtattatca cccccaatta 240
 taccagtacga caaccacctt atgtagtttt tacatgatag ctctgtagaa gtttcacatc 300
 t 301

<210> 270
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 270
 cattgaagag cttttgcgaa acatcagaac acaagtgcct ataaaattaa ttaagcctta 60
 cacaagaata catattcctt ttatttctaa ggagttaaac atagatgtag ctgatgtgga 120
 gagcttgctg gtgcagtgca tattggataa cactattcat ggccgaattg atcaagtcac 180
 ccaactcctt gaactggtc atcagaagaa ggggtggtgca cgatatactg cactagataa 240
 tggaccaacc aactaaattc tctcaccagg ctgtatcagt aaactggcct aacagaaaaa 300
 a 301

<210> 271
 <211> 301
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(301)
 <223> n = A,T,C or G

<400> 271
 aaaagggtct cataagatta acaatttaaa taaatatttg atagaacatt ctttctcatt 60
 ttatagctc atctttaggg ttgatattca gttcatgctt cccttgctgt tcttgatcca 120
 gaattgcaat cacttcacga gctgtattc gctccaattc tctataaagt ggggtccaaagg 180
 tgaaccacag agccacagca cactctttc ccttggtgac tgccttcacc ccattgaggt 240
 tctctctccc agatganaac tgatcatgcy cccacatttt ggggtttata gaagcagtc 300
 c 301

<210> 272
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 272
 taaattgcta agccacagat aacaccaato aaatggaaca aatcactgtc ttcaaatgtc 60
 ttatcagaaa accaaatgag cctggaatct tcataatacc taacacatgcc gtatttagga 120
 tccaataatt cctcatgat gagcaagaaa aattctttgc gcacccctcc tgcattccaca 180
 gcatcttctc caacaaatat aaccttgagt ggcttctgtt aatctatgtt ctttgttttc 240
 ctaaggactt ccattgcacg tctacaata ttttctctac gcaccactag aattaagcag 300
 g 301

<210> 273
 <211> 301
 <212> DNA
 <213> Homo sapien

<220>

<221> misc_feature
 <222> (1)...(301)
 <223> n = A,T,C or G

<400> 273
 acatgtgtgt atgtgtatct ttgggaaaaa aanaagacat ctgttttayt atttttttgg 60
 agagangctg ggacatggat aatcacwtaa ttgtctayta tyactttaat ctgactygaa 120
 gaaccgtcta aaaataaaat ttaccatgac dttatcttct tatagtatgc ttatttcacc 180
 tttyttctgt ccagagagag tatcagtgc ananatttma gggtgaamac atgmatttgt 240
 gggactntty ttacngagm acctgccc sgccgctctg makcngantt ccgcsananc 300
 t 301

<210> 274
 <211> 301
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(301)
 <223> n = A,T,C or G

<400> 274
 cttataact cttctcaga ggcaaaagag gagatggta atgtagacaa ttctttgag 60
 aacagtaaat gattattaga gagaangaat ggaccaagga gacagaat aacttgtaa 120
 tgattctctt tgaattctga atgagatcaa gaggccagct ttactttgtg gaaaagtcca 180
 tctaggtagt gttgcattct cgtctctttt tctgcagtag ataagaggt aaccgaaggc 240
 aattgtgctt cttttgataa gaagctttct tggtcatac aggaatattc aganaaagtc 300
 c 301

<210> 275
 <211> 301
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(301)
 <223> n = A,T,C or G

<400> 275
 tgggtgtcag cagcacgtgg cattgaacat tgcaatgtg agcccaaac acagaaaatg 60
 gggtgaaatt ggccaacttt ctattaactt atgttggcaa ttttgccacc aacagtaagc 120
 tggcccttct aataaaagaa aattgaaagg ttctcacta aacggaatta agtagtgag 180
 tcaagagact cccaggcctc agcgtacctg cccggggcgc cgctcgaagc cgaattctgc 240
 agatatccat cacactggcg gncgctcgan catgcatcta gaaggnccaa ttgcacctat 300
 a 301

<210> 276
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 276
 tgtacacata ctcaataaat aaatgactgc attgtggtat tattaactata ctgattatat 60
 ttatcatgtg acttctcaatt agaaaatgta tccaaaagca aaacagcaga tatacaaaa 120
 taaagagaca gaagatagac attaacagat aaggcaactt atacattgag aatccaaatc 180
 caatacattt aaacattttg gaaatgaggg ggacaaatg aagccagatc aaatttgtgt 240

aaaactattc agtatgtttc ccttgcttca tgtctgagaa ggctctcctt caatggggat 300
g 301

<210> 277
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 277
tttgttgatg tcagtatttt attacttgcg ttatgagtgc tcacctggga aattctaaag 60
atacagagga ctggagagga gcagagcaac tgaatttaac ttaaaagaag gaaaacattg 120
gaatcatggc actcctgata ctttcccaaa tcaacactct caatgcccac ccctcgctct 180
caccatagtg ggaagactaa agtggccacg gatttgcctt angtggtcag tgcgttctga 240
gttcnctgtc gattacatct gaccagtctc ctttttccga agtcnctcag ttcaatcttg 300
c 301

<210> 278
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 278
taccactaca ctccagcctg ggcaacagag caagacctgt ctcaaagcat aaaatggaat 60
aacatatcaa atgaacacag gaaaatgaag ctgacaattt atggaagcca gggcttgtca 120
cagtccttac tgttattatg cattacctgg gaatttatat aagcccttaa taataatgcc 180
aatgaacatc tcatgtgtgc tcacaatggt ctggcactat tataagtgtc tcacaggttt 240
tatgtgttct tegtacattt atggantag tactcggcgg cgaacacgct aagccgaatt 300
c 301

<210> 279
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 279
aaagcaggaa tgacaaagct tgcttttctg gtatgttcta ggtgtattgt gacttttact 60
gttatattaa ttgccaatat aagtaaatat agattatata tgtatagtgt ttcaaaaagc 120
ttagaccttt accttccagc caccocacag tgcttgatata ttacagatga gtcattgggt 180
atacatgtgt agttccaaag cacataagct aganaanaaa atatttctag ggagcactac 240
catctgtttt cacatgaat gccacacaca tagaactcca acatcaattt cattgcacag 300
a 301

<210> 280

<211> 301
 <212> DNA
 <213> Homo sapien

<400> 280
 ggtaactggag ttttctctcc ctgtgaaac gtaactactg ttgggagtga attgaggatg -60
 tagaaagctg gtggaaccac attgtggtca atggaatag gagaatatgg ttctcactct 120
 tgagaaaaaa acctaaagatt agcccaggtg gttgcctgta acctcagttt ttctgcctgg 180
 gtttgatata gtttaggggtt ggggttagat taagatctaa attacatcag gacaaagaga 240
 cagactatta actccacagt taattaagga ggtatgttcc atgtttattt gttaaagcag 300
 t 301

<210> 281
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 281
 aggtacaaga aggggaatgg gaaagagctg ctgctgtggc attgttcaac ttggatattc 60
 gccgagcaat ccaaatcctg aatgaagggg catcttctga aaaaggagat ctgaatctca 120
 atgtgtgtag aatgggttta tcgggttata cggatgagaa gaactccott ttgagagaaa 180
 tgtgtagcac actgcgatta cagctaaata acccgattt gtgtgtcatg ttgtcatttc 240
 tgacaagtga aacaggatct tacgatggag ttttgtatga aaacaaagtt gcagtcacct 300
 g 301

<210> 282
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 282
 caggtactac agaattaaaa tactgacaag caagtagttt ctgtggctgc acgaattgca 60
 tccagacccc aaaaattaaag aaattcaaaa agacattttg tgggcacctg ctgacacaga 120
 agcgacaga caaagcccag gcagaacctat gctaaccctta cagctcagcc tgacagaga 180
 cgcagaagca aagcccaggc agaaccatgc taaccttaca gctcagcctg cacagaagcg 240
 cagaagcaaa gcccaggcag aacatgctaa ccttacagct cagcctgcac agaagcacag 300
 a 301

<210> 283
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 283
 atctgtatac ggcagacaaa cttttatarag tgtagagagg tgagcgaaag gatgcaaaa 60
 cacttttagg gctttataat aatatgctgc ttgaaaaaaa aatgtgtag ttgatactca 120
 gtgcattccc agacatagta aggggttgct ctgaccaatc aggtgatcat tttttctatc 180
 acttcccag tttttgcaa aaattttgtt aaattctata atggtgatat gcattcttta 240
 ggaacatat acatttttaa aaattctatt tatgtaagaa ctgacagacg aatttgcttt 300
 g 301

<210> 284
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 284
 caggtacaaa acgctattaa gtggcttaga attgaacat ttgtgtgtctt tatttacttt 60

```

gcttcgtgtg tgggcaaagc aacatcttcc ctaaatatat attaccaaga aaagcaagaa    120
gcagattagg tttttgacaa aacaaacagg ccaaaagggg gctgacctgg agcagagcat    180
ggtgagaggc aaggcatgag agggcaagtt tgtgtgtggac agatctgtgc ctactttatt    240
actggagtaa aagaaaacaa agttcattga tgtcgaagga tatatacagt gttagaiaatt    300
a

```

<210> 285

<211> 301

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(301)

<223> n = A,T,C or G

<400> 285

```

acatcaccat gatcggtatcc cccaccatt atacgttgtga tgtttacata aatactcttc    60
aatgatcatt agtgttttaa aaaaaactact gaaaactcct tctgcatccc aatctctaac    120
caggaaagca aatgctattt acagacctgc aagccctccc tcaaacnaaa ctatttctgg    180
ataaatatg tctgactctt tttgaggtca cagcactagg caaatgctat ttacgatctg    240
caaaagctgt ttgaagagtc aaagcccca tgtgaacacg atttctggac cctgtaacag    300
t

```

<210> 286

<211> 301

<212> DNA

<213> Homo sapien

<400> 286

```

taccactgca ttccagcctg ggtgacagag tgagactcgg tctccaaaaa aaactttgtct    60
tgtatatatt ttttgcctta cagtggatca ttctagtagg aaaggacagt aagatTTTTT    120
atcaaatgtg gtcattgccag taagagatgt tatattcttt tctcatttct tccccacca    180
aaaataagct accatatagc ttataagtct caaatttttg ccttttacta aaatgtgatt    240
gtttctgttc atttgtatg cttcatcacc tatattaggc aaattccatt tttcccttg    300
t

```

<210> 287

<211> 301

<212> DNA

<213> Homo sapien

<400> 287

```

tacagatctg ggaactaaat attaaaaatg agtgtggctg gatatatgga gaatgttggg    60
ccagaagga acgtagagat cagatattac aacagctttg ttttgagggt tagaaatatg    120
aaatgatttg gttatgaacg cacagtttag gcagcagggc cagaatcctg accctctgcc    180
ccgtgggtat ctctcccca gcttggctgc ctcatgttat cacagtattc catTTTgttt    240
gttgcatgct ttgtgaagcc atcaagattt tctcgtctgt tttcctctca ttggtaatgc    300
t

```

<210> 288

<211> 301

<212> DNA

<213> Homo sapien

<400> 288

```

gtcacctaa ctgcaaggag agctgaggaa tgtaatgggc agccgctttt aaagaagtag    60
agtcaatagg aagacaiaat ccagttccag ctcatgtctg gtatctgcaa agctgcaaaa    120

```

```

gatctttaa gacaatttca agagaatatt tccttaaaagt tggcaatttg gagatcatac 180
aaaagcatct gcttttgtga ttttaatttag ctcatctggc cactggaaga atcacaacag 240
tctgccttaa ttttggatga atgcatgatg gaaattcaat aatttagaaa gttaaaaaaa 300
a 301

```

<210> 289

<211> 301

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(301)

<223> n = A,T,C or G

<400> 289

```

ggtaacactgt ttccactgta tgtttctaca cattgctacc tcagtgtctc tggaaactta 60
gctttttagtg tctccaagta gtccaccttc atttaactct ttgaaactgt atcatctttg 120
ccaagtaaga gtgggtggcct atttcagctg ctttgacaaa atgactggct cctgacttaa 180
cgttctataa atgaattgtgc tgaagcaaag tgcccatggt ggcggcgaan aagagaaaga 240
gtgtttttgt tttggactct ctgtggtccc ttccaatgct gtgggtttcc aaccagnnga 300
a 301

```

<210> 290

<211> 301

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(301)

<223> n = A,T,C or G

<400> 290

```

acactgagct cttcttgata aatatacaga atgcttggca tatacaagat tctatactac 60
tgactgatct gttcattttct ctacacgctc ttaccccaaa aagcttttcc accctaagtg 120
ttctgacctc cttttctaata cacagttagg atagaggcag anccacctac aatgaacatg 180
gagttctatc aagaggcaga aacagcacag aatcccagtt ttaccattcg ctacagctgc 240
tgcttgaac aaaaacattt ctccatgtct cattttcttc atgctcgaag taacagtga 300
a 301

```

<210> 291

<211> 301

<212> DNA

<213> Homo sapien

<400> 291

```

caggtaccaa tttcttctat cctagaaaca ttctatttta tgttgttgaa acataacaac 60
tatatcagct agattttttt tctatgcttt acctgctatg gaaaatttga cacattctgc 120
tttactcttt tgtttatagg tgaatcacia aatgtatttt tatgtattct gtatgtcaat 180
agccatggct gtttacttca ttttaattat ttagcataaa gacattatga aaaggcctaa 240
acatgagctt cacttcccca ctaactaatt agcatctggt atttcttaac cgtaatgcct 300
a 301

```

<210> 292

<211> 301

<212> DNA

<213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)... (301)
 <223> n = A,T,C or G

<400> 292
 accttttagt agtaatgtct aataataaat aagaaatcaa ttttataagg tccatatagc 60
 tgtattaaat aatttttaag tttaaaagat aaaataccat cattttaaat gttggtattc 120
 aaaaccaag natataacgc aaaggaaaaa cagatgagac ataaaaatgat ttgcnagatg 180
 ggaaatatag taattyatga atgttnatta aattccagtt ataatagtgg ctacacacac 240
 tcaactacaca cacagacccc acagtctctat atgccacaaa cacatttcca taaacttgaaa 300
 a 301

<210> 293
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 293
 ggtaccaagt gctggtgcc gctgtgtacc tgttctcact gaaaagtctg gctaattgctc 60
 ttgtgtagtc actttctgatt ctgacaatca atcaatcaat ggctagagc actgactgtt 120
 aacacaaagc tcaactgcaa agtagcaaca gctttaaagc taaatacaaa gctgttctgt 180
 gtgagaattt tttaaaaggc tactttgata ataacccttg tactttttaa tgtacctcgg 240
 ccgogaccac gctaagccga attctgcaga tatccatcac actggcgggc ctgcagagcat 300
 g 301

<210> 294
 <211> 301
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)... (301)
 <223> n = A,T,C or G

<400> 294
 tgaccataaa caatatacac tagctatott ttttaactgtc catcattagc accaatgaag 60
 attcaataaa attacottta ttccacacac tcaaaaacaa tctgcaaat cttagtgaa 120
 ttttaactata gtccacaganc ttaaatattc acattgtttt ctatgtctac tgaataaag 180
 ttcaactact ttctgggata ttctttacaa aatcttatta aaattcctgg tattatcacc 240
 cccaattata cagtagcaca accaccttat gtagttttta catgatagct ctgtagaggt 300
 t 301

<210> 295
 <211> 305
 <212> DNA
 <213> Homo sapien

<400> 295
 gtactctttc tctccctccc tctgaattta attctttcaa cttgcaattt gcaaggatta 60
 cacatttccac tctgatgtat attgtgttgc aaaaaaaaaa gtgtctttgt ttaaaattac 120
 ttggttttgt aatccatctct gctttttccc catgtgaact agtcattaac ccatctctga 180
 actggtagaa aaacrtctga agagctagtc tatcagcatc tgacaggatga attgtaggt 240
 tctcagaacc atttcaacca gacagcctgt ttctatcctg ttttaataat tagttttgggt 300
 tctct 305

<210> 296
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 296
 aggtactatg ggaagctgct aaaataatat ttgatagtaa aagtatgtaa tgtgctatct 60
 caccctagtag taaactaaaa ataaactgaa actttatgga atctgaagtt attttccttg 120
 attaaataga attaactaac caatatgagg aaacatgaaa ccatgcaatc tactatcaac 180
 tttgaaaaag tgatggaacg aaccacttag ctttcagatg atgaacactg ataatgctatt 240
 tgtcattact ataaatttta aaatctgtta ataagatggc ctatagggag gaaaaggggg 300
 c 301

<210> 297
 <211> 300
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(300)
 <223> n = A,T,C or G

<400> 297
 actgagtttt aactggagcg caagcaggca aggctggaag gttttgctct cttttgctta 60
 aagggttttga aaaccttgaa ggagaatcat ttggacaaga agtacttaag agtctagaga 120
 acaaagangt gaaccagctg aaagctctcg ggggaanctt acatgtgttg ttaggcctgtg 180
 tccatcattg ggagtgcact ggccatccct caaaatttgt ctgggctggc ctgagtgggc 240
 accgcacctc ggccgagacc aogctaagcc gaattctgca gatatacatc acactggcgg 300

<210> 298
 <211> 301
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(301)
 <223> n = A,T,C or G

<400> 298
 tatgggggtt gtcacccaaa agctgatgct gagaagggc tccctggggc cccctcccgcg 60
 ggcactctgag agacctgggt ttccagtgtt ttgggaatg ggtccacagt ccgcccggctg 120
 tgaagctctc agatcaatca cgggaaggcg ctggcggtgg tggccacctg gaaccacctc 180
 gtctctgtct tttacatttc actaycaggt ttctctggg cattacnatt tgttccacct 240
 caacagtgac ctgtgcattc tgctgtggcc tgctgtgtct gcaggtggct ctcagcgagg 300
 t 301

<210> 299
 <211> 301
 <212> DNA
 <213> Homo sapien

<400> 299
 gttttgagac ggagtttcc tctgtgtgcc cagactggac tgcaatggca gggctctctgc 60
 tcaactgacc ctctgcctcc caggttcgag caattctcct gcctcagcct cccaggtagc 120
 tgggattgca ggctcaagcc accataccca gctaatttt ttgtattttt agtagagacg 180
 gagtttgcgc atgttggcca gctgggtcca aactcctgac ctcaagcgac ctgcctgcct 240

cggcctccca aagtgtctgga attataggca tgagtcaaca cgcccagcct aaagatatatt 300
t 301

<210> 300

<211> 301

<212> DNA

<213> Homo sapien

<400> 300

attcagtttt atttgcgtcc ccagtatctg taaccaggag tgccacaaaa tcttgccaga 60
tatgtccac acccaactgg aaaggctccc acctggctac ttcctctatc agctgggtca 120
gctgcattcc acaaggttct cagcctaagt agtttccacta cctgccagtc tcaaaactta 180
gtaaagcaag accatgacat tccccacgg aaatcagagt ttgccccacc gtcctgttac 240
tataaagcct gcctctaaca gtccctgtct cttcacacca atcccgagcg catcccccat 300
g 301

<210> 301

<211> 301

<212> DNA

<213> Homo sapien

<400> 301

ttaaaatttt gagaggataa aaaggacaaa taatctagaa atgtgtcttc ttcagttctgc 60
agaggacccc aggtctccaa gcaaccacat ggtcaagggc atgaataatt aaaagttggt 120
gggaactcac aaagaccctc agagctgaga caccacacac agtgggagct cacaaagacc 180
ctcagagctg agacaccacc aacagtgagg gctcacaaag accctcagag ctgagacacc 240
cacaacagca cctcgttcag ctgccacatg tgtgaataag gatgcaatgt ccagaagtgt 300
t 301

<210> 302

<211> 301

<212> DNA

<213> Homo sapien

<400> 302

aggtagacac tttagcttctg gtaaatgact cacaaaaactg attttaaaat caagttaatg 60
tgaattttga aaattactac ttaactctaa ttccacaataa caatggcatt aaagtttgac 120
ttgagttggt tcttagtatt atttatggta aataggctct taccacttgc aaataactgg 180
ccacatcatt aatgactgac ttcccagtaa ggctctctaa ggggtaagta ggaggatcca 240
caggatttga gatgctaagg ccccgagatg cgtttgatcc aaccctctta ttttcagagg 300
g 301

<210> 303

<211> 301

<212> DNA

<213> Homo sapien

<400> 303

aggtagaac tgtggaaata ggtagaggat cattttttct ttccatatca actaagttgt 60
atattgtttt ttgacagttt aacacatctt cttctgtcag agattcttcc acaatagcac 120
tggctaattg aactaccgct tgcattgtta aaatggtggt ttgtgaaatg atcatagggc 180
agtaacgggt atgtttttct aactgatctt ttgctcgttc caaagggacc tcaagacttc 240
catcgatttt atatctgggg tctagaaaag gagttaatct gttttccctc ataaattcac 300
c 301

<210> 304

<211> 301

<212> DNA

<213> Homo sapien

<400> 304

acatggatgt	tattttgcag	actgtcaacc	tgaatttgta	tttgcttgac	attgcctaatt	60
tattagtttc	agttttcagct	taccacacttt	ttgtctgcaa	catgcaraas	agacagtgcc	120
cttttttagtg	tatcatatga	ggaatcatct	cacattgggt	tgtgccatta	ctggtgcagt	180
gaacttcagc	cacttgggta	aggtggagtt	ggccatatgt	ctccactgca	aaattactga	240
ttttcctttt	gtaattaata	agtggtgtgt	tgaagattct	ttgagatgag	gtatatatct	300

c

301

<210> 305

<211> 301

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(301)

<223> n = A,T,C or G

<400> 305

gangtacagc	gtggtcaagg	taacaagaag	aaaaaaatgt	gagtgccatc	ctgggatgag	60
cagggggaca	gacctggaca	gacacgttgt	catttctgct	tgtgggtagg	aaaatgggag	120
taaaaggaga	gaaacagata	caaaatctcc	aactcagtat	taaggtattc	tcacgtctag	180
aatatttgta	gaaacaagaa	tacattcata	tgccaaataa	ctaaccatgg	tggacaacaaa	240
ttctgggatt	taagttggat	accaangaaa	ttgtattaaa	agagctgttc	atggaataag	300

a

301

<210> 306

<211> 8

<212> PRT

<213> Homo sapien

<400> 306

Val	Leu	Gly	Trp	Val	Ala	Glu	Leu
1							5

<210> 307

<211> 637

<212> DNA

<213> Homo sapien

<400> 307

acagggratg	aagggaaaag	gagaggatga	ggaagccccc	ctggggattt	ggtttgttcc	60
ttgtgatcag	gtggtctatg	gggcttatcc	ctacaaagaa	gaatccagaa	atagggggac	120
attgaggaat	gatacttgag	cccaaagagc	attcaatcat	tgttttattt	gccttmtttt	180
cacaccattg	gtgaggagg	gattaccacc	ctggggttat	gaagatgggt	gaacacccca	240
cacatagcac	cgagatatg	agatcaacag	tttcttagcc	atagagattc	acagcccaga	300
gcaggaggac	gcttgacac	catgcaggat	gacatggggg	atgcgctcgg	gatttgtgtg	360
aagaagcaag	gactgttaga	ggcaggcttt	atagtaacaa	gacggtgggg	caaaactctga	420
tttcgtggg	ggaatgtcat	ggtcttgctt	tactaaagttt	tgagactggc	aggtagttaa	480
actcattagg	ctgagaacct	tgtggaatgc	acttgaccca	actgatagag	gaagtatgca	540
ggtgggagcc	tttccacgtg	ggtgtggggc	atatctggca	agattttgtg	gcactcctgg	600
ttacagatag	tggggcagca	aataaaactg	aatcttgg			637

<210> 308

<211> 647

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)... (647)

<223> n = A,T,C or G

<400> 308

acgattttca	ttatcatgta	aatcgggtca	ctcaaggggc	caaccacagc	tgggagccac	60
tgctcaagg	aaggttcaata	tgggaacttc	tactgcccc	ggttctatac	aggatataaa	120
gngcctcac	agtatagata	tggtagcaaa	gaagaagaaa	caaacactga	tctctttctg	180
ccaccctct	gaccttttg	aactcctctg	accctttaga	acaagcctac	ctaatactctg	240
ctagagaaaa	gaccaacaac	ggcctcaaa	gatctcttac	catgaaggtc	tcagctaatt	300
cttggtctaa	atgtgggttc	cacattaggt	tctgaatatg	gggggaaggg	tcaatttgct	360
cattttgtgt	gtggataaag	tcaggatgcc	caggggccag	agcagggggc	tgcttgcttt	420
gggaacaatg	gctgagcata	taacctagg	ttatggggaa	caaaacaaca	tcaaagtcac	480
tgtatcaatt	gcatcagaag	cttgagggac	ctgaatctac	cgattcatct	taaggcagca	540
ggacagtttt	gagtgccaac	aatgcagcag	cagaatcaat	ggaacaaca	gaatgattgc	600
aatgtccttt	ttttctctc	gctctcgact	tgataaaagg	ggaccgt		647

<210> 309

<211> 460

<212> DNA

<213> Homo sapien

<400> 309

actttatagt	ttaggctgga	cattggaaaa	aaaaaaaaag	cagaacaaca	tgtgatagat	60
aatagattgt	gctgcacact	tcagactga	tgaatgatga	acgtgatgga	ctattgtatg	120
gagcacatct	tcagcaagag	gggaaataac	tcatactttt	tgccagcag	ttgtttgac	180
accacaacac	atgccagaat	actcagcaaa	ccttctttag	ctttgagaag	tcaaatgccc	240
ggggaattta	ttcctggcaa	ttttaattgg	actccttatg	tgagagcagc	ggctaccacg	300
ctgggtgtgt	ggagcgaacc	cgctactagt	ggacatgcag	tgccagacgt	cctggttaacc	360
acctagagga	atacacaggc	acatgtgtga	tgccaagcgt	gacacctgta	gcactcaaat	420
ttgtcttgtt	tttgtctttc	ggtgtgtaag	attcttaagt			460

<210> 310

<211> 539

<212> DNA

<213> Homo sapien

<400> 310

acgggactta	tcaataaag	ataggaaaag	aagaaaactc	aaatattata	ggcagaaaatg	60
ctaaaggttt	taaaatatgt	caggattgga	agaaggcatg	gataaagaac	aaagtccagt	120
taggaagaag	aaacacagaa	ggaagagaca	caataaaaagt	cattatgtat	tctgtgagaa	180
gtcagacagt	aagattttgt	ggaatgggt	tggtttgttg	tatggtatgt	attttagcaa	240
taattcttat	ggcagagaaa	gctaaaatcc	tttagctttg	gtgaatgac	acttgctgaa	300
ttcctcaagg	taggcacatg	gaaggagggt	tttagaggaga	cacagacaca	atgaactgac	360
ctagattagaa	agccttagta	tactcagcta	ggaatagtga	ttctgagggc	acactgtgac	420
atgattatgt	cattacatgt	atggtagtga	tggggtatgt	aggaaggaag	aacttatggc	480
atattttcc	ccccacaaa	gtcagttaaa	tattgggaca	ctaaccatcc	aggtcaaga	539

<210> 311

<211> 526

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)... (526)

<223> n = A, T, C or G

<400> 311

caaatttgag	ccaatgacat	agaattttac	aaatcaagaa	gcttattctg	gggccatttc	60
ttttgacgtt	ttctctaaac	tactaaagag	gcattaatga	tccataaatt	atattatcta	120
catttcacagc	atttataaatg	tgttcagcat	gaaatattag	ctacagggga	agctaaataa	180
attaacaatg	gaataaagat	ttgtccttaa	atataatcta	caagaagact	ttgatatttg	240
tttttcacaa	gtgaagcatt	cttataaaagt	gtcataacct	ttttggggaa	actatgggaa	300
aaaatgggga	aactctgaag	ggttttaagt	atcttacctg	aagctacaga	ctccataacc	360
tctctttaca	gggagctcct	gcagccccta	cagaaatgag	tggtctgagat	tcttgattgc	420
acagcaagag	cttctcatct	aaaccctttc	cctttttagt	atctgtgtat	caagtataaa	480
agttctataa	actgtagtnt	acttatatta	atccccaaag	cacagt		526

<210> 312

<211> 500

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)... (500)

<223> n = A, T, C or G

<400> 312

cctctctctc	cccacccct	gactctagag	aactggggtt	tctccagta	ctccagcaat	60
tcattttctga	aagcagttga	gccactttat	tccaaagtac	actgcagatg	ttcaaactct	120
ccattttctct	ttcccttcca	cctgcagatt	ttgtctgactc	tcaactctgtc	atgagtgttaa	180
gcatttaagga	cattatgctt	cttcgattct	gaagacaggc	cctgctcatg	gatgactctg	240
gcttcttagg	aaaatatttt	tcttccaaaa	tcagtaggaa	atctaaactt	atccctcttt	300
tgcatagtgc	tagcagcttc	agacatttgg	ttaagaacct	atgggaaaaa	aaaaaatctt	360
tgctaattgtg	gtttcctttg	taaacanga	ttcttatttg	nctggatatg	aatatcagct	420
ctgaacgtgt	ggtaaagatt	tttggtttg	aatataggag	aaatcagttt	gctgaaaaat	480
tagtcttaat	tatctattgg					500

<210> 313

<211> 718

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)... (718)

<223> n = A, T, C or G

<400> 313

ggagatttgt	gtggtttgca	gcogaggag	accaggaaga	tctgcatggt	gggaaggacc	60
tgatgataca	gaggtgagaa	ataagaaag	ctgctgactt	taccatctga	gcgccacat	120
ctgctgaaat	ggagataaatt	aaatcacta	gaaacagcaa	gatgacaata	taatgtctaa	180
tgagtgcacat	gttttttgca	atttccagcc	cttttaata	tccacacaca	caggaagcac	240
aaaagggaagc	acagagatcc	ctgggagaaa	tgcccggccg	ccatctttgg	tcactgatga	300
gctcgcctct	gtgcctgntc	ccgctttgga	gggaaggaca	ttagaaaaatg	aattgatgtg	360
ttccttaaa	gaggtcagga	aaacagatcc	tyttgtggat	atttatttga	acgggattac	420
agattttgaaa	tgaagtacaa	aagtgcagcat	taccaatgag	aggaacacag	acgagaaaaat	480
cttgatgggtt	cacaagcatc	gcaacaaaca	aaatgggaata	ctgtgatgac	acgagcagcg	540
aactggggag	gagataccac	ggggcagagg	tcaggattct	ggccctgctg	cctaactgtg	600
cgttatataca	atcattttcta	tttctaccct	caacacagct	gtngaatact	tgacttaacg	660
ttctnttggc	ccacattttc	atnatccacc	ccntctnttt	aannttantic	caaantgt	718

<210> 314
 <211> 358
 <212> DNA
 <213> Homo sapien

<400> 314
 gtttatttac attacagaaa aaacatcaag acaatgtata ctatttccaa tatatccata 60
 cataatcaaa tatagctgta gtacatgttt tcaattgggt agattaccac aaatgcaagg 120
 caacatgtgt agatctcttg tcttattctt ttgtctataa tactgtattg tgtagtccaa 180
 gctctcggtta gtccagccac tgtgaaacat gctcccttta gattaacctc gtggagcgaa 240
 ttgtgttatt gctgaactgt agtgcctctg attttgcctc tgtctgtgaa ttctgttgct 300
 tctggggcat tctcttgtga tgcagaggac caccacacag atgacagcaa tctgaatt 358

<210> 315
 <211> 341
 <212> DNA
 <213> Homo sapien

<400> 315
 taccactccc ccgctggcac tgatgagccg catcaccatg gtcaccagca ccatgaaggc 60
 ataggtgatg atgaggacat ggaatgggoc cccaaggatg gtcgtgccaa agaagcaggt 120
 gaccccaatt ctgaagatgt ctggaaacctc taaccagcagg atgatgatag ccccaatgac 180
 agtccaccagc tcccgcacca gccggatatac gtccttaggg gtcagttagg ctctctgaag 240
 tagcttctgc tgaagagggt tgttgtcccg ggggctcgtg cggttattgg tctctgggctt 300
 gagggggcgg tagatgcagc acatggtgaa gcagatgatg t 341

<210> 316
 <211> 151
 <212> DNA
 <213> Homo sapien

<400> 316
 agactgggca agactcttac gccccacact gcaatttggt ctgtgtccg tatccattta 60
 tgtgggcctt tctcgagttt ctgattataa acaccactgg agcgatgtgt tgactggact 120
 cattcaggga gctctggttg caatattagt t 151

<210> 317
 <211> 151
 <212> DNA
 <213> Homo sapien

<400> 317
 agaactagtg gatcctaagt aaatacctga aacatatatt ggcatttatac aatggctcaa 60
 atcttctatt atctctggcc ttaaccctgg ctccctgaggc tgcggccagc agatcccagg 120
 ccagggctct gttcttgcca cactgcttg a 151

<210> 318
 <211> 151
 <212> DNA
 <213> Homo sapien

<400> 318
 actggtggga ggcgtgtttt agttggctgt ttccagaggg gtccttcgga gggacctcct 60
 gctgcaggct ggagtgcttt tattctggc gggagaccgc acattccact gctgaggctg 120
 tggggggcgt ttatcaggca gtgataaaca t 151

<210> 319

<211> 151
 <212> DNA
 <213> Homo sapien

<400> 319
 aactagtggg tccagagcta taggtacagt gtgatctcag ctttgcaaac acattttcta 60
 catagatagt actaggtatt aatagatatg taaagaaaga aatcacacca ttaataatgg 120
 taagattggg tttatgtgat tttagtgggt a 151

<210> 320
 <211> 150
 <212> DNA
 <213> Homo sapien

<400> 320
 aactagtggg tccactagtc cagtgtgggt gaattccatt gtgttggggt tctagatcgc 60
 gagcggtgc cctttttttt tttttttttg ggggggaatt tttttttttt aatagttatt 120
 gagtgttcta cagcttacag taaataccat 150

<210> 321
 <211> 151
 <212> DNA
 <213> Homo sapien

<400> 321
 agcaactttg tttttcatcc aggttatitt aggcttagga tttcctctca cactgcagtt 60
 taggtgtgca ttgtaaccag ctatggcata ggtgttaacc aaaggctgag taaacatggg 120
 tgctctgag aaatcaaat cttcatcac t 151

<210> 322
 <211> 151
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(151)
 <223> n = A,T,C or G

<400> 322
 atccagcatc ttctcctggt tcttgctctc ctttttcttc ttcttasatt ctgcttgagg 60
 tttgggttg gtcagtttgc cacaggcgtt ggagatgggt acagtcttct ggcattcgcc 120
 attgtgcagg gctcgttcca nacttccagt t 151

<210> 323
 <211> 151
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(151)
 <223> n = A,T,C or G

<400> 323
 tgaggacttg tttttttttt cttttttttt aatcctctta ckttgtaaat atattgccta 60
 nagactcant tactaccag ttgtgggtt twtggggagaa atgtaactgg acagttagct 120
 gttcaatyaa aaagacactt ancccatgtg g 151

<210> 324
 <211> 461
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(461)
 <223> n = A, T, C or G

<400> 324
 acctgtgttg aatttcagct ttctcatgc aaaaggattt tgtatcccg gctacttga 60
 agaagtgtgc agctaaagga atccaggttg ttggttgac tgttaatacc ttgatgaaa 120
 agagttacta cgaatcccat ctgtgttcca gctatatcac tgacagcatg gtgagaagat 180
 gcgaacctca ctctagact ttcaagggtg gacgaaacgg gtccagaaac tgcagggggc 240
 ctcatcacgg gatatacaaa taccctttgt gctaccacgg cccctgggaa tcaagtgact 300
 cacacaaatg caatagtgtg tcactgcatt tttaactgaa ccaaaagctaa acccgtgtgt 360
 gccaccatgc accatggcat gccagagttc aacactgttg ctctgaaaa ttgggtctga 420
 aaaaacgcac aagagccctt gccctgccct agctgangca c 461

<210> 325
 <211> 400
 <212> DNA
 <213> Homo sapien

<400> 325
 acactgtttc catgttatgt ttctacacat tgctaacctca gtgctctctg aaacttagct 60
 ttgatgtct ccaagtagtc cactctcatt taactctttg aaactgtatc atcttttgcca 120
 agtaagagtg gtggcctatt tcagctgctt tgacaaaatg actggtctct gacttaacgt 180
 tctataaatg aatgtgtctga agcaaatgtc ccatggtggc ggcgaagaag agaaagatgt 240
 gttttgtttt ggactctctg ttgtcccttc caatgctgtg gttttccaac caggggaagtg 300
 gtcccttttg catggccaag tgccataacc atgagcacta cgctaccatg gttctgcctc 360
 ctggccaagc aggtgtgttt gcaagaatga aatgaatgat 400

<210> 326
 <211> 1215
 <212> DNA
 <213> Homo sapien

<400> 326
 ggaggactgc agcccgact cgcagccctg gcaggcgcca ctggtcatg aaaacgaatt 60
 gttctgctcg gggtcctggt tgcacccgca gtgggtgctg tcagccgcac actgtttcca 120
 gaactcctac accatcgggc ttggcctgca cagtcttgag gccgaccaag agccaggagag 180
 ccagatggtg gaggccagcc tctcgtacg gcaccagag tacaacagac ccttgcctgc 240
 taacgacctc atgtctatca agttggacga atcgtgtcc gactctgaca ccatccggag 300
 catcagactg gcttcgcagt gccctaccgc ggggaactct tgctctgttt ctggctgggg 360
 tctgtcggg aacgcgcgaa tgccactcgt gctgcagtgc gtgaacgtgt cgtgtgtgtc 420
 tgaggaggtc tgacgtaagc tctatgacc gctgtaccac cccagcatgt tctgcgccgg 480
 cggaggacaa gaccagaagg actcctgcga cgtgactct ggggggcccc tgatctgcga 540
 cgggtacttg caggcccttg tgtcttctcg aaaagccccc gttggcccaag ttggctgtgc 600
 aggtgtctac accaacctct gcaaatccac tgagtggata gagaaaaccg tccagggcag 660
 ttaactctcg ggaactggaa ccatgaaat tgaccacca atacatcctg cggaaaggat 720
 tcaggaatat ctgttccag cccctctccc ctacggccca ggagtcagg cccccagccc 780
 ctctctccct aaaccaaggg tacagatccc cagccctccc tccctcagac ccaggagtcc 840
 agacccccca gccctctctc cctcagaccc aggaagtcag cccctctccc ctacagacca 900
 ggagtcacga cccccagccc cctctctccc cagaccagg ggtccaggcc cccaacctcc 960
 cctccctcag actcagaggt ccaagccccc aacctctcct tcccagacc cagaggtcca 1020

```

ggteccagcc cctcctccct cagaccagc ggtccaatgc cacctagact ctccctgtac 1080
acagtgcgcc ctgtggcac gttgacccaa cctaccagt tggtttttca tttttgtgcc 1140
ctttcccca gatccagaaa taaagtctaa gagaagcgca aaaaaaaaaa aaaaaaaaaa 1200
aaaaaaaaa aaaa 1215

```

```

<210> 327
<211> 220
<212> PRT
<213> Homo sapien

```

```

<400> 327
Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu Val Met
1      5      10      15
Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp Val
20     25     30
Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly
35     40     45
Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val Glu
50     55     60
Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu Leu Ala
65     70     75     80
Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser Asp
85     90     95
Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly Asn
100    105   110
Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg Met Pro
115    120   125
Thr Val Leu Gln Cys Val Asn Val Ser Val Ser Glu Glu Val Cys
130    135   140
Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys Ala Gly
145    150   155   160
Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly Gly Pro
165    170   175
Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly Lys Ala
180    185   190
Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu Cys Lys
195    200   205
Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
210    215   220

```

```

<210> 328
<211> 234
<212> DNA
<213> Homo sapien

```

```

<400> 328
cgctgtctc tggtagctgc agccaaatca taaacggcga ggactgcagc ccgcaactgc 60
agccctggca ggcggcactg gtcattggaa acgaattgt ctgctgggc gtccctgtgtc 120
atcgcagtg ggtgctgtca gccacacact gttccagaa ctctacacc atcgggctgtg 180
gcctgcacag tcttgaggcc gaccaagagc cagggagcca gatggtggag gcc 240

```

```

<210> 329
<211> 77
<212> PRT
<213> Homo sapien

```

```

<400> 329
Leu Val Ser Gly Ser Cys Ser Gln Ile Ile Asn Gly Glu Asp Cys Ser

```

1	5	10	15
Pro His Ser Gln Pro Trp Gln Ala Ala Leu Val Met Glu Asn Glu Leu			
	20	25	30
Phe Cys Ser Gly Val Leu Val His Pro Gln Trp Val Leu Ser Ala Thr			
	35	40	45
His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly Leu His Ser Leu			
	50	55	60
Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val Glu Ala			
65	70	75	

<210> 330
 <211> 70
 <212> DNA
 <213> Homo sapien

<400> 330
 cccaacacaa tggcccgatc ccateccctga ctccgcccctc aggatcgctc gtctctggta 60
 gctgcagcca 70

<210> 331
 <211> 22
 <212> PRT
 <213> Homo sapien

<400> 331
Gln His Asn Gly Pro Ile Pro Ser Leu Thr Pro Pro Ser Gly Ser Leu
1 5 10 15
Val Ser Gly Ser Cys Ser
20

<210> 332
 <211> 2507
 <212> DNA
 <213> Homo sapien

<400> 332

tgtgtccgct	gcagccggga	gagatggttg	agctcatggt	cccgctgttg	ctccctcttc	60
tgcccttctc	tctgtatatg	gctgogcccc	aaatcaggaa	aatgctgtcc	agtggggtgt	120
gtacatcaac	tggtcagctt	ctctgggaaag	tagttgtggt	cacaggagct	aatacaggta	180
tcgggaagga	gacagccaaa	gagctggctc	agagaggagc	tcgagtatat	ttagcttgcc	240
gggatgtgga	aaagggggaa	ttggtggcca	aagagatcca	gaccacgaca	gggaaccage	300
aggtgttggt	gcggaaactg	gacctgtctg	atactaagtc	tattcgagct	tttgtcaagg	360
gcttctttag	tgaggaaaag	cacctccacg	ttttgatcaa	caatgcagga	gtgatgatgt	420
gtccgtactc	gaagacagca	gatggctttg	agatgcacat	aggagtcaac	cacttgggtc	480
acttctctct	aacctactgt	ctgctagaga	aactaaagga	atcagcccca	tcaaggatag	540
taaaatgtgc	ttccctcgca	catcacctgg	gaaggatcca	cttccataac	ctgcagggcg	600
agaaattcta	caatgcaggc	ctggcctact	gtcacagcaa	gctagccaac	atcctcttca	660
cccaggaact	ggcccgagga	ctaaaaggct	ctggcgcttac	gacgtattct	gtacaccctg	720
gcacagtcca	atctgaaact	gttcggcact	catctttcat	gagatggatg	tggtggcttt	780
tctctttttt	catcaagact	octcagcagg	gagcccgagc	cagcctgcac	tggtccttaa	840
cagaaggctc	tgagatttcta	agtgggaaatc	atttcagtga	ctgtcatgtg	gcatgggtct	900
ctgcccacag	tcgtaatgag	actatagcaa	ggcggctgtg	ggacgtcagt	tgtagacctgc	960
tgggcctccc	aatagactaa	caggcagtg	cagttggacc	caagagaaga	ctgcagcaga	1020
ctacacagta	cttcttgcta	aaatgatctc	ccttcaaggt	tttcaaaacc	tttagcacaa	1080
agagagcaaa	accttccagc	cttgctgtct	tggtgtccag	ttaaaactca	tggtactgccc	1140
agattcgctc	aaatgtctgt	catgtccaga	tttactttgc	ttctgttact	gcagaggtta	1200
ctagagatat	cataaatagg	taagaagacc	ctcatatgac	ctgcacagct	cattttcctt	1260
ctgaagaaaa	ctactacctc	ggagaatcta	agctatagca	gggatgatgt	atgcaaaattt	1320

gaactagctt	ctttgttcac	aattcagttc	ctcccaacca	accagttctc	acttcaagag	1380
ggccacactg	caacctcagc	ttaacatgaa	taacaaagac	tggtctcagg	gcagggtctg	1440
cccaggcatg	gtggatcacc	ggaggtcagt	agtttcaagac	cagcctggcc	aacatggtga	1500
aaacccacct	ctactaaaaa	ttgtgtatat	ctttgtgtgt	ctctctgttt	atgtgtgcc	1560
agggagatt	ttcacaaagt	tcaaaacagc	cacaataatc	agagatggag	caaacacagtg	1620
ccatccagct	tttatgcaaa	tgaattgctg	caaaggggaag	cagattctgt	atatgttggt	1680
aactaccoc	caagagcaca	tggttagcag	ggaagaagta	aaaaaagaga	aggagaatac	1740
tggagaataa	tgacacaaat	gaagggacta	gttaaggatt	aactagccct	tttaaggatta	1800
actagttaag	gattataagc	aaaagayatt	aaatatgcta	acatagctat	ggaggaattg	1860
agggcaagca	ccaggagact	atgaggtctt	aacaaaaacc	agtggtggca	aaaaaaaaaa	1920
aaaaaaaaaa	aaaaatccta	aaacacaaaca	aacaaaaaaa	acaattcttc	attcagaaaa	1980
attatcttag	ggactgatat	tggtaatat	ggtcaattta	ataataat	ggggcatttc	2040
cttcattagt	cttgacaaag	ttaaaatgct	tggtccaaaa	ttttgtattt	tatttgaga	2100
cttcttatca	aaagttaatg	tgccaaagga	agttcaagga	attagttagt	ttccatcac	2160
ttgtttggag	tgctctattc	taaaagattt	tgatttctgt	gaatgacaa	tatatattaa	2220
ctttgttggg	ggaaaagatt	ataggaccac	agttcttact	tctgataact	gtaaaataat	2280
cttttatttg	actgtttttg	accattaagc	tatatgttta	gaattggtca	ttttacggaa	2340
aaattagaaa	aattctgata	atagtgacga	ataaatgaat	taattgttta	cttaatttat	2400
atggaactgt	caatgcacaa	taaaaattct	ttttgattat	ttttgttttt	catttaccag	2460
aataaaaaacy	taagaattaa	aagtttgatt	acaaaaaaaa	aaaaaaa		2507

<210> 333

<211> 3030

<212> DNA

<213> Homo sapien

<400> 333

gcagcgact	tgcgagctgg	gagcgattta	aaacgctttg	gattccccgc	gcctgggtgg	60
ggagagcgag	ctgggtgcc	ctcagattcc	ccgcgccgcg	acctcatgag	ccgaccctcg	120
gctccatgat	gcccgccaat	tatgccacct	tgatggagc	caaggatata	gaaggcttgc	180
tgggagcggg	agggggggcg	aatctggtcg	cccactcccc	tctgaccacg	caccacggcg	240
cgctacagct	gatgcctgct	gtcaactatg	cccccttggg	tctgcccagg	tcggcgggag	300
cgccaaaagc	atgccaccca	tgccctgggg	tgccccaggg	gacgtcccca	gctcccgctg	360
cttatgggta	ctttggaggc	gggtactact	ctgcgcaggt	gtcccggagc	tcgctgaac	420
ctgtgcccga	ggcagccacc	ctggcccggt	accccggcga	gactcccacg	gcgggggaag	480
agtaaccocag	ycgcccactc	gagtttgcc	tctatccggg	atatccggga	acctaccagc	540
ctatggccag	ttaacctggac	gtgtctgtgg	tgacagactc	gggtgctcc	ggagcaaccg	600
gacatgactc	ctgttgcct	gtggacagtt	accagttctg	ggctctcgct	gggtgctgga	660
acagccagat	gtgttgcag	ggagaaacaga	accacacagg	tcctttttgg	aaggcagcat	720
ttcagacact	cagcgggcag	caccctcctg	acgctcgcgc	ctttcgtcgc	ggccgcaaga	780
aacgacttcc	gtacagcagg	gggcagttgc	gggagctgga	gcgggagatg	cgcgctaa	840
agttctatcac	caaggacaag	agggcccaaga	tctcggcagg	caccagcctc	tcggagcgcc	900
agattaccat	ctggttttcag	aaocgcgggg	tcaaaagaga	gaaggtctc	gccaaaggtg	960
agaacacgcg	taccccttaa	gagatctcct	tgccctgggt	ggagggagcg	aagtgggggt	1020
gtcctggggg	gaccaggaac	ctgccaaagc	caggctgggg	ccaaggactc	tgctgagagg	1080
ccctagaga	caacacccct	ccagggccac	tggtctgtgg	actgttctc	ggagagcgcc	1140
tggttaccca	gtatgtgcag	ggagacggaa	ccccatgta	cagccactca	caccagggtt	1200
cccaagaac	gtggccagct	cataatcatt	ctactcgtga	gtggcaataa	tcacgataac	1260
cagtaactag	tgccatgatc	gttagcctca	tattttctat	ctagagctct	gtagagcaat	1320
aagcaaacgc	tttctatgaa	ttgagctaat	tatgaataaa	tttggaaagg	tgactccttg	1380
cagggaagct	ttctctcaga	cccccttcca	ttacacctct	caccctggtg	acagcaggaa	1440
gtgagggag	aggggaaacg	gcagattcgt	tggtgctgtg	tgatgtccgt	ttagcatttt	1500
tctcagctga	cagctgggta	ggttgacaat	tgtagagctg	gtctctctcc	ccctccttgt	1560
ccaccctaca	gggtgtacc	actggtcttg	gaagcaccca	tccttaatac	gtgattttt	1620
ctgtcgtgtg	aaaatgaagc	cagcaggctg	ccctcagtca	gtccttctct	ccagagaaaa	1680
agagatttga	gaaagtgcct	gggttaattca	coattaattt	ctcccccac	actctctgag	1740
tcttccctta	atatctctg	tggttctgac	caaaagcagg	catcggtttg	tgagcatttg	1800
ggtaccacgt	gaagttagat	ttttagacct	tgcatactta	gcccttccca	ggcacaacg	1860

gagtgccaga	gtggtgccaa	cctctgtttc	ccagtcacg	tagacagatt	cacagtgcgg	1920
aattctggaa	gctggagaca	gacgggctct	gtgcagagcc	gggactctga	gagggacatg	1980
agggcctctg	cctctgtgtt	catctctctg	tgtcctgtac	ctgggctcag	tgcccgggtg	2040
gactcatctc	ctggccgcgc	agcaaaagcca	gcgggttctg	gctggctcct	cctgcacatt	2100
aggctggggg	tggggggcct	gccggcgcat	tctccacgat	tgagcgacaa	gcctggaagt	2160
ctggacaacc	cgcagaaccg	aagctccgag	cagcgggtcg	gtggcgagta	gtggggctcg	2220
tgggcgctag	ttggtgtgtg	gccgcggccg	ccactacctc	gaggacattt	ccctcccggg	2280
gccagctctc	ctagaaaccc	cgcggcgccc	gccgcagcca	agtgtttatg	gccgcgggtc	2340
gggtggggtc	ctagccctct	ctctctctct	gggaaggagt	gagggctgga	gctgacttag	2400
acacctcaaa	atctattacc	caaaaggagag	cccgggactg	agggaaaagg	ccaaagagtg	2460
tgagtgcctg	cggactgggg	gttcaggggg	agaggacagag	gaggaggaaag	atgaggtcga	2520
tttctgattt	taaaaaatcg	tccaaagccc	gtggtccagc	tttaaggtcct	cggttaccatg	2580
cgcgcctcag	agcaggtcac	tttctgcctt	ccagctctct	cttcaaggaa	gccccattgt	2640
ggtagctttc	aatatgcgag	gttcttactc	ctctgctctc	ataagctcaa	accaccaaac	2700
gatcggggcaa	gtaaaacccc	tcctctgcgc	acttoggaa	tgggcgagagt	tcagcgacga	2760
tgggctctgt	gggagggggc	aagatagatg	agggggagcg	gcattggtcgc	gggtgacccc	2820
ttggagagag	gaaaaaggcc	acaaaggagg	gctccacgcg	cactaacgga	gatggccctg	2880
ctagagacat	tttgggtctc	ggaacctctg	gaactcccat	gctctaaact	ccacactctg	2940
ctatcagaaa	cttaaacctg	aggattttct	ctgtttttca	ctcgcaataa	aytcagagca	3000
aacaaaaaaa	aaaaaaaaaa	aaactcgag				3030

<210> 334

<211> 2417

<212> DNA

<213> Homo sapien

<400> 334

ggcggccgct	ctagagctag	tgggatcccc	cgggctgcac	gaattcggca	cgagtgaagt	60
ggagttttac	ctgtatttgt	ttaatttcaa	caagcctgag	gactagccac	aaatgtacc	120
agtttaca	tgaggaacca	gggtcaaaaa	ggttgttacc	tgctaaagg	cgtatgtggc	180
agagccaaga	tttgagccca	gttatgtctg	atgaacttag	cctatgctct	ttaaactctt	240
gaatgctgac	cataggagat	atctaaactt	agatcaattg	caatttccct	ccaagactat	300
ttactttaca	atacaataat	accacottta	ccaatctatt	gtttgtatc	gagactcaaa	360
tatgccagat	atatgtaaaa	gcaacctaca	agctctctaa	tcatgtctac	ctaaaaagatt	420
cccgggactc	aataggctca	aagaaacttc	ttctagaaat	ataaaagaga	aaattggatt	480
atgcacaaaa	tcatatttaa	tttttttcat	ccatccttta	attcagcaaa	caatttatctg	540
ttgttgactt	tatgcagtat	ggccttttaa	ggattggggg	acaggtgaa	acggcggtgc	600
cagaattgcat	cctctacta	atgaggtcag	tacaactttg	caatttaaaa	tgccctgtgc	660
agctggcgct	gggtgactat	gcctgtaatc	tcaacattgg	aaggccaagg	caggaggatt	720
gcttcagccc	aggagttcaa	gaccagcctg	ggcaacatag	aaagaccoca	gtctccaatc	780
aatcaataca	tgccctgtct	ttgaaaaata	aaactcttaa	gaaaggttta	atgggcaggg	840
tgtggtagct	cactgctata	atacagcact	ttgggagctt	gaggcaggag	gatcacttta	900
gcccagaagt	tcaagaccag	cctgggcaac	aagtgcacac	tcatctcaat	tttttaataa	960
aatgaataca	tacataaaga	aagataaaaa	gaaaagttta	atgaagaagt	acagattataa	1020
acaaatctct	tggaactaaa	agtatttttg	ttcaagccaa	atattgtgaa	tcacctctct	1080
gtgttgctga	tacagataat	ctaagccagc	gaaactgagc	agaaagtcca	tgtactaaact	1140
aatcaaccgg	agcgaagcca	aaaaatgagc	taactaatca	atccgaggca	aggggcaaat	1200
tagagcgaac	ctgactctgg	tctattaaag	gacaactttc	cctctgtgtt	atttttcttt	1260
tattcaatgt	aaaaggataa	aaactctcta	aaactaaaaa	caatgtttgt	caggagttac	1320
gaacctgaac	caactaatta	tggggaatca	taaaatatga	ctgtatgaga	tcttgatggt	1380
ttacaaagt	taaccactgt	taatcacttt	aaacattaat	gaacttaaaa	atgaatttac	1440
ggagattgga	atgtttcttt	cctgttgtat	tagttggctc	agggctccat	acaaaaatac	1500
cacagactgg	gaggtctaa	taacagaat	tcattttctc	cagtctctgg	ggctggaa	1560
ccacgatcaa	ggtgcaggaa	aggcagcgtt	catctctgag	ccctctctct	ggctccaatg	1620
tgccacacct	cccaactgct	gctcacatga	cctctgtgtg	ctcctggaaa	gaggggtggt	1680
gggacagagg	gaaagagaag	gagagggaac	tctctggtgt	ctcgtctttc	aaagacccta	1740
acctggcccca	ctttggcccca	ggcactgtgg	ggtgggggtg	tgtgctctct	ctgctctgac	1800
tggccaagat	aaagcaaacg	aaaaatgtcc	aaagctgtgc	agcaaaagaca	agccaccggaa	1860

caggagatctc	ctcctatcgtc	tggggagacac	caagtctggcc	acccttggag	caagccccc	1920
cagcagccac	gcgaaggtggc	agcagcagaa	ggcgggaatt	gtccctcgct	ttggcacatt	1980
ctccaccgac	cttgtgtgatc	tggaacactgc	gatgaatgac	aattgtgatg	agaaatgatg	2040
ggactccag	aaaagagagac	ccagctgtctc	agtggtcgctc	aaatcaatc	agccttcctc	2100
ctggggagga	actggggggcc	tgattctcggg	tcagagagac	ggcccgatga	ggtgagaagt	2160
acagctctgc	ctgccagctgt	gtatcccaagt	cccggtgcac	cagtaataca	ggctgacgag	2220
atcaggtctc	ccggagtgatc	ttcttgggaag	cgcacctgtg	ggtgagtttg	ctctctcgct	2280
gtgactgaga	caaatattgtc	ataaatccaa	tcgcctctgt	tatccctttt	ttctttttat	2340
ctgtctacat	ctataatcac	tatgcatact	agtctttgtt	agtgtttcta	ttcmacttaa	2400
tagatgata	ttatact					2417

```
<210> 335
<211> 2984
<212> DNA
<213> Homo sapien
```

<400> 335						
aatccctcctt	cccactctc	ctttccagaa	ggcacttggy	gtcttatctg	tgtgaactctg	60
aaaaacactt	aggcgccct	ccaaggcttc	cccaaacc	taagcagcgc	cagaagcgct	120
cccgagctgc	ctctcccc	acctcaggtg	tcagagtTga	ggaggaagt	agccatacaga	180
agtaactctg	ggcccttgaa	cggcgccgga	tggcacaaga	cctcaagctc	acggagaccc	240
aagtgaaagt	atggttcag	aacagacgct	ataagactaa	gcgaaaagcg	ctctctccgg	300
agctgggaga	cttggaaga	cactctctct	tgcgcgccct	gaagaaggag	gcctctcccc	360
ggcgctccct	ggctccogt	tatacagct	atctctcata	cccatcattg	tactcgctgg	420
gcagctggag	cccgagcttt	ttgtaaagtc	agctcaggtg	acaaccatta	tgatcaaaa	480
ctgctctccc	cagggttgt	ctatgaaag	ccaaggggc	caaggtcgag	gagcaagagg	540
tgtgcacacc	aaagacttg	gagattttgc	tggaaattgc	asattcttca	ctggtgtagc	600
aatgaaacaa	cagagacagt	gaaagtTTa	atacctaagt	cattccccca	gtgcatactg	660
tagttcattt	tttttgtct	tggtcacctg	tttgaagggt	agagagggaa	aatcaagtgg	720
tttcttccag	cactttgat	gatttttgat	gagctgtaca	ccaaggatt	ctgttctgca	780
actccactcc	octgtgtcac	tgaatatcaa	ctctgaaaga	gcaaacctaa	caggagaaag	840
gcacaccaag	atgaggattg	caccaactga	atataactct	agtccagaag	ctctcctgtg	900
gccttggaa	atggccaaag	ctctctctgt	ccctgtaaaa	ggagggggca	aatagagagt	960
ctccaaagga	acgcctccat	ctgcagcaca	tatttgatgt	ggagggggga	atgggtggga	1020
ggagatgaaa	atatcagctt	ctcttatccc	tttttatctc	ttttaaaagt	gtatgccaac	1080
ttaagtattt	acaggtgtgc	ttccataaga	caagatgcac	tcogctgtgt	tttaagacaa	1140
tcgtataaaa	cagaaactgc	ctgcagaag	gggggcgggg	ccaggaagaat	ctccgctgtg	1200
ccaagacagg	ggcctaaaga	gggtctccac	actcgtctga	ggggctgatt	caatttttta	1260
ttagatgaaa	gtggaaaagc	ctctctcaac	ttttttcccc	ttgctgtcga	gaatttaaga	1320
tcagaagttt	octggagtt	tcaggctctc	atataactgt	tatcctgaaa	ggcaacataa	1380
ttcttccctc	ctctctttta	aaattttgtg	ttccttttgc	cagcaattac	tcactaaagg	1440
gcttcaattt	agtcagattt	tttatgtctg	ctgcacotta	cttatgcctc	gttatattag	1500
cccgagattt	gggtcttttt	tttttttttt	tttttcgtc	ttcccaaaac	ctttattctg	1560
ttgacttttt	aaaaaaaaag	gggggcagat	ttctgaattg	cttaaaagac	tgcattttta	1620
aaactagcaa	ctcttatctc	ttctctttta	aaatacatag	cattaaatoc	caaatctcat	1680
ttaagaacct	gacagcttga	gaaggtcaet	actgcattta	taggacattc	tgggtggctt	1740
gctgttacgt	ttgaagtctg	acaactcttg	agaattcttg	ctatcgagag	aggttaagtc	1800
tattggagtt	tcacagagga	agaaacagc	gcagaagtga	gggccaggtc	tgactgagct	1860
tcadgtggat	ggctctagg	tgggacatgg	caagaagagg	agcctagacc	ctggggagcc	1920
cagtcacact	agcaagcaag	ggaactgagt	agcctctttg	agggaaaagg	taagaaaaag	1980
gaaaacactg	ctaaacacaa	acaagaagact	gtccaaagct	tttgggaact	gtgtttattg	2040
ccataaatgg	gtccccaaaa	tgggtaacct	agacttcaga	gagaatgagc	agagagacaa	2100
ggagaaactt	gggtgtccct	caactttcat	ttctgttatc	caggtgagct	ggtgagaggg	2160
agacacttag	aaaaaatgaa	acaataaac	aatattaact	ggagttagct	gagggcctgtg	2220
agctcttga	ctccactact	taatccggtt	tagtgaagaa	ctcttcaatt	ttctttattt	2280
agaagggcca	gcttactgtt	ggttgcaaaa	ttgcacaact	aagttaaatg	aaagttggcc	2340
aatttccacc	cattttctgt	gggttgggct	ccacatgta	atgttcaatg	ccacgctgtg	2400
ctgacaccca	ccggagactc	aggtgacaca	aaagctcagg	tagctcattc	tgctttctgc	2460

```

tctttacatt tcttttaaaa taagcattta gtgctcagtc cctactgagt actctttctc 2520
tcccctcctc tgaatttaat tctttcaact tgcaatttgc aaggattaca catttccagt 2580
tgatgtatat tgtgttgcaa aaaaaaaaaa aagtgctctt gtttaaaatt acttggtttg 2640
tgaatccatc ttgctttttc cccattggaa ctatgcatta acccatctct gaactggtag 2700
aaaaacatct gaagagctag tctatcagca tctgacaggt gaattggatg gttctcagaa 2760
ccatttccacc gagacagcct gtttctatcc tgtttaataa attagtttgg gttctctaca 2820
tgcataacaa accctgtccc aatctgtcac ataaaaagct gtgacttgaa gtttagtcag 2880
cacccccacc aaacttttatt tttctatgtg ttttttgcaa catatgagtg ttttgaaaaa 2940
aaagtcacca tgtctttatt agaaaaaaa aaaaaaaaaa aaaa

```

<210> 336
 <211> 147
 <212> PRT
 <213> Homo sapien

<400> 336

Pro	Ser	Phe	Pro	Thr	Leu	Leu	Ser	Arg	Arg	His	Leu	Gly	Ser	Tyr	Leu
1				5					10				15		
Leu	Asp	Ser	Glu	Asn	Thr	Ser	Gly	Ala	Leu	Pro	Arg	Leu	Pro	Gln	Thr
			20					25				30			
Pro	Lys	Gln	Pro	Gln	Lys	Arg	Ser	Arg	Ala	Ala	Phe	Ser	His	Thr	Gln
		35				40					45				
Val	Ile	Glu	Leu	Glu	Arg	Lys	Phe	Ser	His	Gln	Lys	Tyr	Leu	Ser	Ala
	50				55					60					
Pro	Glu	Arg	Ala	His	Leu	Ala	Lys	Asn	Leu	Lys	Leu	Thr	Glu	Thr	Gln
				70						75				80	
Val	Lys	Ile	Trp	Phe	Gln	Asn	Arg	Arg	Tyr	Lys	Thr	Lys	Arg	Lys	Gln
			85						90					95	
Leu	Ser	Ser	Glu	Leu	Gly	Asp	Leu	Glu	Lys	His	Ser	Ser	Leu	Pro	Ala
			100					105					110		
Leu	Lys	Glu	Glu	Ala	Phe	Ser	Arg	Ala	Ser	Leu	Val	Ser	Val	Tyr	Asn
		115					120					125			
Ser	Tyr	Pro	Tyr	Tyr	Pro	Tyr	Leu	Tyr	Cys	Val	Gly	Ser	Trp	Ser	Pro
	130					135						140			

Ala Phe Trp
145

<210> 337
 <211> 9
 <212> PRT
 <213> Homo sapien

<400> 337

Ala	Leu	Thr	Gly	Phe	Thr	Phe	Ser	Ala
1				5				

<210> 338
 <211> 9
 <212> PRT
 <213> Homo sapien

<400> 338

Leu	Leu	Ala	Asn	Asp	Leu	Met	Leu	Ile
1				5				

<210> 339
 <211> 318

<212> PRT

<213> Homo sapien

<400> 339

```

Met Val Glu Leu Met Phe Pro Leu Leu Leu Leu Leu Pro Phe Leu
1      5      10      15
Leu Tyr Met Ala Ala Pro Gln Ile Arg Lys Met Leu Ser Ser Gly Val
20      25      30
Cys Thr Ser Thr Val Gln Leu Pro Gly Lys Val Val Val Val Thr Gly
35      40      45
Ala Asn Thr Gly Ile Gly Lys Glu Thr Ala Lys Glu Leu Ala Gln Arg
50      55      60
Gly Ala Arg Val Tyr Leu Ala Cys Arg Asp Val Glu Lys Gly Glu Leu
65      70      75      80
Val Ala Lys Glu Ile Gln Thr Thr Thr Gly Asn Gln Gln Val Leu Val
85      90      95
Arg Lys Leu Asp Leu Ser Asp Thr Lys Ser Ile Arg Ala Phe Ala Lys
100     105     110
Gly Phe Leu Ala Glu Glu Lys His Leu His Val Leu Ile Asn Asn Ala
115     120     125
Gly Val Met Met Cys Pro Tyr Ser Lys Thr Ala Asp Gly Phe Glu Met
130     135     140
His Ile Gly Val Asn His Leu Gly His Phe Leu Leu Thr His Leu Leu
145     150     155     160
Leu Glu Lys Leu Lys Glu Ser Ala Pro Ser Arg Ile Val Asn Val Ser
165     170     175
Ser Leu Ala His His Leu Gly Arg Ile His Phe His Asn Leu Gln Gly
180     185     190
Glu Lys Phe Tyr Asn Ala Gly Leu Ala Tyr Cys His Ser Lys Leu Ala
195     200     205
Asn Ile Leu Phe Thr Gln Glu Leu Ala Arg Arg Leu Lys Gly Ser Gly
210     215     220
Val Thr Thr Tyr Ser Val His Pro Gly Thr Val Gln Ser Glu Leu Val
225     230     235     240
Arg His Ser Ser Phe Met Arg Trp Met Trp Trp Leu Phe Ser Phe Phe
245     250     255
Ile Lys Thr Pro Gln Gln Gly Ala Gln Thr Ser Leu His Cys Ala Leu
260     265     270
Thr Glu Gly Leu Glu Ile Leu Ser Gly Asn His Phe Ser Asp Cys His
275     280     285
Val Ala Trp Val Ser Ala Gln Ala Arg Asn Glu Thr Ile Ala Arg Arg
290     295     300
Leu Trp Asp Val Ser Cys Asp Leu Leu Gly Leu Pro Ile Asp
305     310     315

```

<210> 340

<211> 483

<212> DNA

<213> Homo sapien

<400> 340

```

gcgcagggtct gcttcacac ggaggacacg agactgcttc ctcaagggct cctgcctgcc      60
tggaacactgc tgggaggcgc tgtttagttg gctgttttca gagggggtctt tcggagggac      120
ctcctgctgc aggcgtggagt gtctttatct ctggcgggag accgcacatt ccactgctga      180
ggttgtgggg gcggtttatc aggcagtgat aaacataaga tgtcatttcc ttgactcogg      240
ccttcaattt tctctttggc tgacgacgga gtcctgtggt tcccgatgta actgacccct      300
gtcccaaacg tgacatcact gatgctcttc tcgggggtgc tgatggcccg cttgtgtcacg      360
tgtcacaact cgccattcga ctttgtctcc aaactgtatg aagcacacctg actgcacgtt      420

```

ttttctgggc ttccagaatt taaagtgaag ggcagcactc ctaagctcog actccgatgc 480
ctg 483

<210> 341
<211> 344
<212> DNA
<213> Homo sapien

<400> 341
ctgctgctga gtcacagatt tcattataaa tagcctccct aaggaaaata cactgaatgc 60
tatttttact aaccattcta tttttataga aatagctgag agtttctaaa ccaactctct 120
gtcgtccttac aagtattata ttttttactt ctttccataa agagttagctc aaaatattgca 180
atttaatttaa taatttctga tgatgggtttt atctgcagta atagtatat catctattag 240
aatttactta atgaaaaact gaagagaaca aaatttgtaa ccactagcac ttaagtactc 300
ctgatttetta acattgtctt taatgaccac aagacaacca acag 344

<210> 342
<211> 592
<212> DNA
<213> Homo sapien

<400> 342
acagcaaaaa agaaactgag aagcccaaty tgctttcttg ttaacatcca cttatccaac 60
caatgtggaa actcttctata ctgggttcca ttatgaagtt ggacaattgc tgctatcaca 120
cctggcaggt aaaccaatgc caagagagtg atggaaacca ttggcaagac ttgtgtgatg 180
accaggtattg gaattttata aaaatattgt tgatgggaag ttgctaaaagg gtgaattact 240
tcctccagaa gagtgtaaag aaaagtccaga gatgctataa tagcagctat ttaatttggc 300
aagtgtcaat gtggaaagag ttccctgtgtg tgctgaagtt ctgaagggca gtcacattca 360
tcagactggg ctgttttggtt caaatgcaaa agcacagtc ttttttagcat gtgggtctct 420
cccgctgctc tatgcaata atcgctctctc tctaaatttc tctatggctc cattttccaa 480
agttctcttt gggtttgtgat gtcttttctg ctttccatta attctataaa atagtatggc 540
ttcagccacc cactcttcgc cttagcttga ccgtgagttc cggtgcgcgc tg 592

<210> 343
<211> 382
<212> DNA
<213> Homo sapien

<400> 343
ttcttgacct cctctcctt caagctcaaa caccacctcc cttattcagg accggcactt 60
cttaagtgtt gtggctttct ctccagctcc tcttaggagg ggtatgggtg gaggttgact 120
ctgtaaactc tctttctccc tttcttcccc tttctctgcc cgccttcccc atctctgtgt 180
agacttcttg attgtcagtc tgtgtcacat ccagtgattg ttttggtttc tgttcccttt 240
ctgactgccc aaggggctca gaacccagc aatccctccc tttcactacc ttcttttttg 300
gggtgtagtg gaagggagtg aaattgtggg ggggaagtag gaggcacatc aataaagagg 360
aaaccaccaa gctgaaaaaa aa 382

<210> 344
<211> 536
<212> DNA
<213> Homo sapien

<400> 344
ctgggctcga agctgtaggg taaatcagag gcaggcttct gagtgtgag agtccctgaga 60
caataggcca cataaacttg gctggatgga acctcacaaat aaggtggta cctctgtttt 120
gtttaggggg atgcacaaga taaggccagc tcagtatatat gaagagaagc agacaacaac 180
agcttttctg agaaattgat gcaatcagag tgggatcccg gtcacatcac ggtcacactc 240
caccttcatg tgccgtgaat gttgccaggt cagaaaaatc cacccttacc gagtgcggct 300

tcgaccctat	atcccccgcc	cgcgctccett	tctccataaa	attcttctta	gtagctatta	360
ccttcttatt	atttgatcta	gaaattgccc	tctttttacc	cctaccatga	gcctacaaa	420
caactaacct	gccactaata	gttatgtcat	ccctcttatt	aatcaccatc	ctagccctaa	480
gtctggccta	tgagtgaacta	caaaaaggat	tagactgagc	cgaataacaa	aaaaaa	536

<210> 345

<211> 251

<212> DNA

<213> Homo sapien

<400> 345

acctttttgag	gtctctctca	ccacctccac	agccaccgtc	accgtgggat	gtgctgggatg	60
tgaatgaagc	ccccatcttt	gtgcctcctg	aaaagagagt	ggaagtgtcc	gaggactttg	120
gcgtggggcca	ggaaatcaca	tctcacactg	cccaggagcc	agacacattt	atggaaacaga	180
aaataacata	tcggatttgg	agagacactg	ccaactggct	ggagattaat	ccggacactg	240
gtgccatttc	c					251

<210> 346

<211> 282

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(282)

<223> n = A,T,C or G

<400> 346

cgcgctctgt	acactgtgat	catgacaggg	gttcaaacag	aaagtgcctg	ggccctcctt	60
ctaagtctctg	ttaccataaaa	aaggaaaaag	aaaagatctt	ctcagttaca	aattctggga	120
aggggagacta	tacctggctc	ttgccctaa	tgagaggctc	tcctcccgcc	acccaaaaat	180
agaaaaggctt	tctatttcac	tgcccagggt	aggggggaag	agagtaactt	tgagtctgtg	240
ggtctcatttt	cccaagggtc	cttcaatgct	catnaaaacc	aa		282

<210> 347

<211> 201

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(201)

<223> n = A,T,C or G

<400> 347

acacacataa	tattataaaa	tgccactctaa	ttggaaggag	ctttctatca	ttgcaagtca	60
taaataatac	tttttaaaaa	ntactancag	cttttaccta	ngctcctaaa	tgcttgtaaa	120
ctctgagactg	actggaccga	cccagaccga	gggcaaaagt	acatgtttacc	atatcatctt	180
tataaagaat	ttttttttgt	c				201

<210> 348

<211> 251

<212> DNA

<213> Homo sapien

<400> 348

ctgttaataca	caacattttg	gcatcacttg	tgccaagtga	gaaaatgttc	taaaatcaca	60
agagagaaca	gtgccagaat	gaaactgacc	ctaagtccca	ggtgccccctg	ggcaggcaga	120

aggagacact	cccagcatgg	aggagggttt	atcttttcat	cctaggtcag	gtctacaatg	180
gggggaaggtt	ttattataga	actccaaca	gccacacctc	ctctgcgcac	ccaccgcgatg	240
gccctgcctc	c					251

<210> 349
 <211> 251
 <212> DNA
 <213> Homo sapien

<400> 349						
taaaaatcaa	gccatttaat	tgtatctttg	aaggtaaaca	atatatggga	gctggatcac	60
aacccctgag	gatgccagag	ctatgggttc	agaacatggt	gtggtattat	caacagagtt	120
cagaagggtc	tgaactctac	gtgttaccag	agaacataat	gcaattcatg	cattccactt	180
agcaattttg	taaaaatcca	gaaacagacc	ccaagagtct	ttcaagatga	ggaaaattca	240
actctcgtgt	t					251

<210> 350
 <211> 908
 <212> DNA
 <213> Homo sapien

<400> 350						
ctggacaact	tgcaggggct	tttgcgtgct	gtcgtcgtcg	cccgctatgc	tactcatcgt	60
agcccgcccg	gtgaagctcg	ctgctttccc	tacctcctta	agtgactgcc	aaacgcccac	120
cggtctgaaat	tgctctggtt	atgatgacag	agaaaatgat	ctctctctct	gtgacaccaa	180
caactgtaaa	tttgcagggg	aattgtttaag	aattggagac	actgtgactt	gcgtctgtca	240
gttcaagtgc	aacaatgact	atgtgcctgt	gtgtggctcc	aatggggaga	gctaccagaa	300
tgaggtgtac	ctgcgacagg	ctgcatgcaa	acagcgaggt	gagatacttg	tggtgtcaga	360
aggatcatgt	gccacagtcc	atgaaggctc	tgagaaaact	agtcaaaagg	agacatccac	420
ctgtgtatatt	tgccagtttg	gtgcagaagt	tgcaggaagt	gccgaggatg	tctgtgtgtg	480
gtgtataatt	gactgttctc	aaaccaactt	caatcccttc	tgcgcttctg	atgggaaatc	540
ttatgataat	gcattgccaa	tcaaaagaagc	atcgtgtcag	aaacaggaga	aaattgaagt	600
catgtctttg	ggctgatgtc	aagataaacac	aactacaact	actaagtctg	aagatgggca	660
ttatgcaaga	acagattatg	cagagaatgc	taacaaatta	gaagaaaagt	ccagagaaca	720
ccacatacct	tgtccggaac	attacaatgg	cttctgcagt	catgggaagt	gtgagcattc	780
tatcaatatg	caggagccat	cttcgagggt	tgtatgtgtg	tatactggac	aacactgtga	840
aaaaaaggac	tacagtgttc	tatacgttgt	tcccggtcct	gtacgatttc	agtatgtctt	900
aatgcgacg						908

<210> 351
 <211> 472
 <212> DNA
 <213> Homo sapien

<400> 351						
ccagtttattt	gcaagtggta	agagcctatt	taccataaat	aatactaaga	accaactcaa	60
gtcaaacctt	aatgccattg	tatttgtgaa	ttaggattaa	gtagtatttt	tcaaaattca	120
catttaactgt	attttaaaat	cagwtttgyg	agtcatttac	cacaagctaa	atgtgtacac	180
tatgataaaa	acaaccattg	tattcctggt	tttctaaaca	gtcctaattt	ctaacactgt	240
atatactcct	cgacatacaat	gaactttgtt	ttcttttact	ccagtaataa	agtaggcaaca	300
gatctgtcca	caacaaactt	gccctctcat	gccctgcctc	tcacatgct	ctgctccagg	360
tcagagccct	tttgcctcgt	ttgttttctg	aaaaacctaa	tgtccttctt	gtctttctgt	420
gtaatatata	tttagggaag	atgttgtctt	gccacacac	gaagcaaatg	aa	472

<210> 352
 <211> 251
 <212> DNA
 <213> Homo sapien

<400> 352
 ctcaaaagcta atctctcggg aatcaaaacca gaaaagggca aggatcttag gcatgggtgga 60
 tgtgtgaatg gccaggtcaa tggctgcaag catgcagaga aagaggtaca tcggagcgctg 120
 caggctcggt tccgtcctta cgatgaagac cagcatgcag ttccaacaac ttgccactac 180
 atacatggaa aggaggggga agccaaccca gaaatgggct ttctctaact ctgggatatacc 240
 aataagcaca a 251

<210> 353
 <211> 436
 <212> DNA
 <213> Homo sapien

<400> 353
 tttttttttt tttttttttt tttttttaca caatgcagtc atttatttat tgagtatgtg 60
 cacattatgg tattattact atactgatta tatttatcat gtgacttcta attaraaaat 120
 gtatccaaaa gcaaaacagc agatatacaa aattaaagag acagaagata gacattaaaca 180
 gataaggcaa cttatacatt gacaatccaa atccaatata tttaaacttt tgggaaatga 240
 gggggacaaa tgggaagccar atcaaatgtt tgtaaaaata ttcatgtatgt ttcccttgct 300
 tcagtcttga raaggctctc ccttcaatgg ggatgacaaa ctccaaatgc cacacaaatg 360
 ttaacagaat actagatcca cactggaacg ggggtaaaga agaaatttat ttctataaaa 420
 gggctcctaa tgtagt 436

<210> 354
 <211> 854
 <212> DNA
 <213> Homo sapien

<400> 354
 ccttttctag ttcaccagtt ttctgcaagg atgctgggta gggagtgtct gcaggaggag 60
 caagctcgaa accaaatcta ggaacatag gaaacgagcc aggcacaggg ctgggtgggcc 120
 atcaggggacc accctttggg ttgatatttt gcttaactct catcttttga gtaagatcat 180
 ctggcagtag aagctgttct ccagggtacat ttctctagct catgtacaaa aacatcctga 240
 aggactttgt caggtgcctt gctaaaagcc agatgcgttc ggcacttcct ttggtctgagg 300
 ttaattgcac acctacaggg actgggctca tgctttcaag tattttgtcc tcaactttagg 360
 gtgagtgaat gatccccatt ataggagcac ttggggagaga tcatataaaa gctgactctt 420
 gagtacatgc agtaaatggg tagatgtgtg ttggtgtgtc tcattcctgc aagggtcttc 480
 gttaggvgagt gtttccagga ggaacaagtc tgaaccaaat catgaaataa atggtagggtg 540
 tgaactggaa aactaatcca aaagagagat cgtgatatca gtgtggttga tacacctttg 600
 caatatggaa ggctctaatt tgccccatatt tgaataata attcagcttt ttgtaataca 660
 aaataacaaa ggattgagaa tcatgtgtgc taatgtataa aagaccagg aaacataaat 720
 atatacaact cataaatgta aaatgcatgt gccccaagaa ggccccaaag tggcagacaa 780
 cattgtacc attttccctt ccaaaatgtg agcggcgggc ctgctgcttt caaggctgtc 840
 acacgggatg tcag 854

<210> 355
 <211> 676
 <212> DNA
 <213> Homo sapien

<400> 355
 gaaattaaagt atgagctaaa ttccctgtta aaacctctag ggggtgacaga tctcttcaac 60
 cagggtcaag ctgactcttc tgggaatgca ccaaccaagg gcctatatat atcaaaaagcc 120
 atccacaagt catacctgga tgtcagcgaa gagggcacgg aggcacagc agccactggg 180
 gacagcatct ctgtaaaaaa cctaccaatg agagctcagt tcaaggcgaa ccacctcttc 240
 ctgttcttta taaggcacac tcataccaac acgatcctat tctgtggcaa gcttgcctct 300
 cccaatcag atggggttga gtaaggctca gagtgtcaga tgaggtgcaa agacaatcct 360
 gtgactttcc caggcccaaa aagctgttca cactcacgc acctctgtgc ctcatgttgc 420

tcatctgc	aaataggtc	ggattcttc	caaccatttc	atgagttgtg	aaagctaaggc	480
tttgtaaac	atggaaaaa	gtagacttat	gcagaaaagcc	ttcttggtct	ttcttatctgt	540
gggtgctcat	ttgagtgctg	tccagtgaca	tgatcaagtc	aatgagtaaa	attttaagg	600
attagatttt	cttgacttgt	atgtatctgt	gagatcttga	ataagtgacc	tgacatctct	660
gcttaaaaga	aaccag					676

<210> 356
 <211> 574
 <212> DNA
 <213> Homo sapien

<400> 356						
tttttttttt	tttttcagga	aaacattctc	ttactttatt	tgcattctcag	caaaggttct	60
catgtggcac	ctgactggca	tcaaaccaaa	gttcgttaggc	caacaaagat	gggccactca	120
caagcttccc	atttgtagat	ctcagtgcc	atgagtattct	gacacctgtt	ccctctctca	180
gtctcttagg	gaggcttaaa	tctgtctcag	gtgtgctaag	agtgccagcc	caaggkgtc	240
aaaagtccac	aaaactgcag	tctgtgctgg	gatagtaagc	caagcagtcg	ctggacagca	300
gagttctttt	cttgggcaac	agataaccag	acaggactct	aatcgtgctc	ttattcaaca	360
ttctctgtct	tctgcctagc	ctggaataaa	aagccaattct	ctctcgtggc	acagggaagc	420
agatacaagc	tcgtttacat	gtgatagatc	taacaaaaggc	atctaccgaa	gtctggtctg	480
gatagacggc	acagggaagc	cttaggtcag	cgctgctggt	tggaggacat	tcctgagtc	540
agctttgcag	ctttgtgca	acagtacttt	ccca			574

<210> 357
 <211> 393
 <212> DNA
 <213> Homo sapien

<400> 357						
tttttttttt	tttttttttt	tttttttttt	tacagaatat	aratgcttta	tcactgkact	60
taatatggkg	kottgttccac	tatacttaaa	aatgcaaccac	tcataaaatat	tttaattcagc	120
aagccacaac	caaracttga	ttttatcaac	aaaaaccctc	aaatataaac	ggsaaaaaag	180
atagatatata	ttattccagt	ttttttaaaa	cttaaaarat	attccattgc	cgaattaaara	240
araarataag	tgtttatatg	aaagaagggc	attcaagcac	actaaaraaa	cctgaggkaa	300
gcataaatctg	tacaaaaatta	aactgtcctt	tttggcattt	taacaaattt	gcacagkctc	360
tttttttctt	tttctgtttt	tttttttttt	tac			393

<210> 358
 <211> 630
 <212> DNA
 <213> Homo sapien

<400> 358						
acagggtataa	caggaggatc	cttgcctcca	cggagcttac	attctagcag	gaggacataa	60
ttaatgttta	taggaaaaat	atgagtttat	gacaaaaggaa	gtagatagtg	ttttacaaga	120
gcataagagta	gggaagctaa	tccagcacag	ggaggtcaca	gagacatccc	taaggaaagt	180
gagtttaaac	tgagagaagc	aagtgtctaa	actgaaggat	gtgttgaaga	agaaggagaga	240
gtagaacaat	ttgggcagag	ggaaccttat	agaccttaag	gtgggaaggt	tcaaaqaact	300
gaagagagagc	tagaacagct	ggagccgttc	tccgtgttaa	agagagagta	aagagataag	360
atttaaaagt	tgaagattaa	gatcttggtg	gcaattcagg	attggcaact	ctacaagaaa	420
tcaactgaag	gagtaaatgt	acattacttt	tcaactcagg	atggccattc	taactccagg	480
gggtagactg	gactaggtaa	gactggaggc	aggtagacct	cttctaaggc	ctgcatagat	540
gaagagacaaa	aataagtggtg	gaatttcagg	ggatagtgaa	aatcagtagg	acttaagtga	600
caagccagag	gttcctccac	aacaaccagt				630

<210> 359
 <211> 620
 <212> DNA

<213> Homo sapien

<400> 359

acagcattcc	aaaatataca	tctagagact	aarrgtaaat	gctctatagt	gaagaagtaa	60
taattaaaaa	atgctactaa	tatagaaaat	ttataatcag	aaaaataaat	atcagggag	120
ctcaccaggaa	gaataaagt	ctctgccagt	tattaaagga	ttactgctgg	tgaattaaat	180
atggcattcc	ccaagggaaa	tagagagatt	cttctggatt	atgttcaata	tttatttcac	240
aggattaaat	gttttaggaa	catagataaa	gcttcgccac	ggaagagatg	gacaaagcac	300
aaagacaaca	tgataccctta	ggaagcaaca	ctaccctttc	aggcataaaa	ttggagaaa	360
tgcaacatta	tgcttcattga	ataatatgta	gaaagaaagt	ctgatgaaaa	tgacatcctt	420
aatgtaaat	aactttataa	gaattctggg	tcaaatataa	ttctttgaag	aaaacatcca	480
aatgtcattg	acttatcaaa	tactatcttg	gcataatacc	tatgaaggca	aaactaaaaa	540
aacaaaaagc	tcacacaaaa	caaaaccatc	aacttatttt	gtattctata	acatacgaga	600
ctgtaaatgat	gtgacagtgt					620

<210> 360

<211> 431

<212> DNA

<213> Homo sapien

<400> 360

aaaaaaaaaa	agccagaaca	acatgtgata	gataaatatga	ttggctgcac	acttccagac	60
tgatgaatga	tgaaagtgtat	ggactattgt	atggagcaca	tcttcagcaa	gagggggaaa	120
tactcatcat	ttttggccag	cagttgtttg	atcaccaaac	atcatgccag	aatactcagc	180
aaacctctct	agctcttgag	aagtcaaat	cogggggaat	ttattctctg	caattttaat	240
tggaactcctt	atgtgagagc	agcggtacc	cagctggggt	ggtggagcga	acccgtcaat	300
agtggacatg	cagtggcaga	gtcctcgtga	accacataga	ggaatacaca	ggcacatgtg	360
tgatgccaa	ggtgacacct	gtagcactca	aatttgtctt	gtttttgtct	ttcgtgtgtg	420
agattcttag	t					431

<210> 361

<211> 351

<212> DNA

<213> Homo sapien

<400> 361

acactgattt	ccgatcaaaa	gaatcatcat	ctttaccttg	acttttcagg	gaattactga	60
acttttctct	cagaagatgat	ggcacagcca	ttgccttgcc	ctcacttgaa	gggtctgcac	120
ttggctctct	tggtctcttg	ccaagtttcc	cagccaactcg	aggagaaaat	atcgaggagt	180
ttgacttctc	ccggggcttt	cccgagggtc	tcacogtgag	cctcgcgccc	ctcagggtcg	240
caatctcgga	ttcaagtctt	gaaacctcgc	tctctgctcg	ctggacttct	gagcgctga	300
ctgccactct	gtcctccagc	tctgacagct	cctcatctgt	ggtcctgttg	t	351

<210> 362

<211> 463

<212> DNA

<213> Homo sapien

<400> 362

acttcatcag	gccataatgg	gtgcctcccg	tgagaatcca	agcacctttg	gactgcgcga	60
tgtagatgag	cgggtggaag	atcttgcgca	tgccgcgctt	cagggcgaag	ttcttggcgc	120
ccocggctac	agaaatgacc	aggttgggtg	ttttcaggtg	ccagtgcgtg	gtcagcagct	180
cgtaaaagatt	ttccgcgtcc	gtgtcgcaag	acagacgtat	atacttccct	ttcttcccca	240
gtgtctcaaa	ctgaatatcc	ccaaaggcgt	cggtaggaaa	ttccttgggt	tgtttcttgt	300
agttccattt	ctcacttttg	ttgatctggg	tgccctccat	gtgctggctc	tgggcatagc	360
cacacttgca	cacattctcc	ctgataagca	cgatgggtg	gacaggaagg	aaggatttca	420
ttgagccctg	ttatggaac	tggtattgtt	agcttaataa	gac		463

<210> 363
 <211> 653
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(653)
 <223> n = A,T,C or G

<400> 363
 acccccagagt nctgncctgg cataactgnga acgaccaacg acacacccaa gctcggcctc 60
 ctcttgngga ttctgggtga catcttcatg aatggcaacc gtgccagwga ggctgtcctc 120
 tggggggcac tacgaagat gggactgcgt cctgggggtga gacatcctct ccttgagatg 180
 ctaacgaac ttctcaccta tgagtgtgtaa agcagaataa cctgnactac agacgagatgc 240
 ccaacagcaa cccccggaa gtatgagttc ctctrgggcc tcggttccca ccatgagasc 300
 tagcaagatg naagtgttga gantcattgc agaggtttcag aaaagagacc cntcgtgact 360
 ggtctgcaca gttcatggag gctgcagatg aggccttgga tgctctggat gctgctgcag 420
 ctgaggcaga agcccgggct gaagcaagaa cccgcattgg aattggagat gaggctgtgt 480
 ntgggcctg gagctgggat gacattgagt ttgagctgct gacctgggat gaggaaggag 540
 attttggaga tccttggtcc agaattccat ttacctctg ggccagatgc caccagaatg 600
 cccgctccag attcctcag acctttgccg gtcccattat tggctstggt ggt 653

<210> 364
 <211> 401
 <212> DNA
 <213> Homo sapien

<400> 364
 actagaggaa agacgtttaa ccactctact accactttgt gaactctcaa agggtaaatg 60
 acaaagccaa tgaatgactc taaaaacaat atttaccatt aatggttgt agacaataaa 120
 aaaacaaagt ggatagatct agaattgtaa cattttaaga aaaccatagc atttgacaga 180
 tgagaagct caattataga tgcaaaagtt taactaaact actatagtag taaagaataa 240
 catttcacac ctttcataa aattcactat cttgcttga ggcaactcct aaaatgatac 300
 acgtgcatag taaattctta tatttgctat ggogttgcac tagaggactt ggactgcac 360
 aagtggatgc gcggaaaatg aaattcttct caatagccca g 401

<210> 365
 <211> 356
 <212> DNA
 <213> Homo sapien

<400> 365
 ccagtgtcat atttgggctt aaaatttcaa gaagggcact tcaaatggct ttgcatttgc 60
 atgtttcagt gctagagcgt aggaatagac cctggcgctcc actgtgagat gttcttcacg 120
 taccagagca tcaagtctct gcacgaggtc attcttgggt aaagaaatga cttccacaaa 180
 ctctccatcc cctggctttg gcttcggcct tgcgttttgc gcatcatctc cgttaatggt 240
 gactgtcaag atgtgtatag tacagtttga caagcctggg tccatacaga ccgctggaga 300
 acattcgcca atgtccctct ttagccagat ttcttcttgc agctcccgga gacgag 356

<210> 366
 <211> 1851
 <212> DNA
 <213> Homo sapien

<400> 366
 tcataccat tggcagcagc ggcaccgtta gtcaggtttt ctgggaatcc cacatgagta 60
 cttccgtgtt cttcattctt cttcaatagc cataaatctt ctagctctgc ctggctgttt 120

tcacttcctt	taagcctttg	tgactcttcc	tctgatgtca	gctttaagtc	ttgttctgga	180
ttgctgtttt	cagaagagat	ttttaacatc	tgtttttctt	tgtagtcaga	aagtaactgg	240
caaattacat	gatgatgact	agaaacagca	tactctcttg	cogtctttcc	agatcttgag	300
aagatacatc	aacattttgc	tcaagtagag	ggctgactat	acttgctgat	ccacaacata	360
cagacagtat	gagagcagtt	cttccatatc	tatccagcgc	atttaaatcc	gcttttttct	420
tgtataaaaa	tttccacact	tgctgttttt	gctcatgtat	accaaagtagc	agtgctgtga	480
ggcctagtct	gttttttgat	tcgatatcag	caccgtataa	gagcagtgct	ttggccattt	540
atttatcttc	atttgtagaca	gcatagtgta	gagtggtatt	tcatactcta	cttggaaat	600
ttggatcagt	gccatgttcc	agcaacatta	acgcacattc	atcttctctg	cgtgtacgg	660
cctttgtcag	agctgtcttc	tttttgttgt	caaggacatt	aagttgacat	cgtctgtcca	720
gcacagattt	tactacttct	gaattcccat	tgccagagcc	cagatgtaga	gcagctctct	780
tttgccttgc	ctcttctgtc	acatccgtgt	cctcgagcat	gacgatgaga	tcctttctgg	840
ggactttacc	ccaccaggca	gctctgtgga	gcttgtccag	atcttctcca	tgagcgtggt	900
acctgggcat	catgaaggcg	ctgtcatcgt	agtcctccca	agcagccacg	ttgctcttgc	960
cgtctccctg	cagcagggga	agcagtgcca	gcacacactg	cactctttgc	tcaccaagct	1020
cttcacagag	gagtcgttgt	ggctctccaga	agtgcccaag	ttgctcttgc	cgtctccctc	1080
gtccatccag	ggaggaagaa	atgcaggaaa	tgaaagatgc	atgcacgatg	gtatactct	1140
gcgccatcaa	acttttggac	agcagggtcac	ttccagcaag	gtggagaagc	ctgtccaccc	1200
acagaggatg	agatccagaa	accacaatat	ccattcacaa	acaaacactt	ttcagccaga	1260
cacaggttat	gaactcatgt	catctcgccg	aacatggtgg	aacctaccca	atcacacatc	1320
aagagatgaa	gaaatcgag	tatatctgca	caacgtataa	ctcttcatcc	atacaaaaa	1380
aatataaatt	tcctctggag	ccatatggat	gaactatgaa	ggaagaactc	cccgagaag	1440
ccagtcgacg	agaagccaca	ctgaagctct	gtctctcagc	atcagcccca	cggacaggat	1500
tgtgttttct	cccagtgat	gcagcctcaa	gttatcccca	agctgcccga	gcacacggtg	1560
gctcctgaga	aacacccccc	ctcttccggg	ctaacacagg	caagtcaata	aatgtgtata	1620
tcacataaac	agaattaaaa	gcaaagtcac	ataagcatct	caacagacac	agaaaaggca	1680
tttgacaaaa	tcacagatcc	ttgtatttat	tggtgcagtt	ctcagagggaa	atgcttctaa	1740
cttttcccca	tttagtatta	tgttggtgtg	gggtgtgtta	taggtggttt	ttattacttt	1800
aaggatgtgc	ccttctatgc	ctgttttgc	gaggggttta	attctctgac	c	1851

<210> 367
 <211> 668
 <212> DNA
 <213> Homo sapien

cttgagcttc	caaataygga	agactggccc	ttacacacgt	caatgttaaa	atgaatgcac	60
ttcagatatt	tgaagataaa	atrrgtagat	ctataccttg	ttttttgatt	cgatatcga	120
accrtataag	agcagtgctt	tgccatttaa	tttatctttc	atrrtagaca	gcrtagtaga	180
gagtggtatt	tcatactcta	ctctgaaat	ttggatcagt	gccatgttcc	agcaacatta	240
acccagcttc	atcttctctg	cattgtacgg	cctgtcagta	ttagaccocaa	aaacaaatta	300
catatcttag	gaattcaaaa	taacattcca	cagctttcac	caactagtta	tatttaaagg	360
agaaaactca	tttttatgcc	atgtattgaa	atcaaaaccca	cctcatgctg	atatagtgg	420
ctcatgcata	cctttatcag	agctgtcctc	tttttgggtg	caaggacatt	aagttgacat	480
cgtctgtcca	gcaggagttt	tactacttct	gaattcccat	tgccagagcc	cagatgtaga	540
gcagctcctat	gagagtgaga	agaactttta	ggaaattgta	gtgcactagc	tacagccata	600
gcaatgatcc	atgtaaactgc	aaacactgaa	tacgtctgta	tactctgtcc	ttcaaaaaaa	660
aaaaaaaa						668

<210> 368
 <211> 1512
 <212> DNA
 <213> Homo sapien

gggtgcgcca	ggggggsgct	gggctttcct	cggttggtgt	tggtttttcc	ctgggtgggg	60
tgggtctggc	tgaatcccc	tgctgggggt	ggcaggtttt	ggctgggatt	gacttttytc	120
tcaaacaga	tggaaaccc	ggagttaact	gctagtgtgt	gaaactggtt	ggtagacgcg	180

atctgttgcc	tactactggc	ttctcctggc	tggtaaaaagc	agatggtggt	tgaggttgat	240
tccatgcggc	ctgctttctc	tggtgaagaag	ccattttggtc	tcaggagcaa	gatggggcaag	300
tggtgtgcgc	gttgctctcc	ctgctgcaag	gagagcgcca	agagcaacgt	gggcaactct	360
ggagaccagc	acgactctgc	tatgaagaca	ctcaggagca	agatgggcaa	gtgggtgcgc	420
cactgtctcc	ccctgtcgag	ggggagtggc	aagagcaacg	tgggcgcttc	tgagagccac	480
gcagayctgc	ctatgaagac	actcaggaaac	aagatgggca	agtgggtgct	ccactgtctc	540
ccctgtcgca	gggggagcrg	caagagcaag	gtggcgcttc	ggggagacta	cgatgacagt	600
gccttcattg	agccccaggt	ccacgtccgt	ggagaagatc	tggaacaagc	ccacagagct	660
gcctggtggg	gtaaagtccc	cagaaaaggat	ctcatcgctc	tgctcagggc	cactgacgtg	720
aacaagaagg	acaagcaaaa	gaggactgct	ctacatctgg	cctctgcca	tgggaaattca	780
gaagtgttaa	aactcstgct	ggacagacga	tgtaacatt	atgtccttga	caacaaaaag	840
aggacagctc	tgayaagcgt	cgtacaatgc	caggaagatg	aatgtgcgtt	aattgttgctg	900
gaacatggca	ctgatccaaa	tattccagat	gagtatggaa	ataccactct	rcactaygct	960
rtctayaatg	aagataaatt	aatggccaaa	gcactgctct	tatayggtgc	tgatatcgaa	1020
tcaaaaaaca	aggtatagat	ctactaattt	tatcttcaaa	atactgaaat	gcattcaatt	1080
taacatgtac	gtgtgtaagg	gccagtcttc	cgtatttgga	agctcaagca	taacttgaat	1140
gaaatatttt	tgaatgacc	taattatctm	agactttatt	ttaaattattg	tatttttcaa	1200
agaagcattc	gaggytgacg	tttttttttt	ttaaattgca	ttctgtgtaa	ttatttttct	1260
gaaaacactg	aattttgtaaa	aggtataact	tactattttt	caatttttcc	ctcttaggat	1320
ttttttcccc	taatgaatgt	aagatggcaa	aatttgccct	gaaataggtt	ttacatgaaa	1380
actccaagaa	aagttaaaac	tgtttcagtg	aatagagatc	ctgctccttt	ggcaagttcc	1440
taaaaaaacg	taatgatagc	gaggtgatgc	gcctgtcagt	ggcaaggttt	aagatatttc	1500
tgatctcgtg	cc					1512

<210> 369

<211> 1853

<212> DNA

<213> Homo sapien

<400> 369

gggtcgccca	ggggsgcgt	gggctttcct	cggtgggtg	tggtttttcc	ctgggtgggg	60
tggtgcgggc	trgaatcccc	tgctggggtt	ggcagggttt	ggctgggatt	gacttttytc	120
ttcaaacaga	ttggaaaccc	ggagttacot	gctagtgtgt	gaaactggtt	ggtagacgog	180
atctgttgcc	tactactggc	ttctcctggc	tggtaaaaagc	agatggtggt	tgaggttgat	240
tccatgcggc	ctgctttctc	tggtgaagaag	ccattttgct	tcaggagcga	gatgggcaag	300
tggtgtgcgc	gttgctctcc	ctgctgcaag	gagagcgcca	agagcaacgt	gggcaactct	360
ggagaccagc	acgactctgc	tatgaagaca	ctcaggagca	agatgggcaa	gtgggtgcgc	420
cactgtctcc	ccctgtcgag	ggggagtggc	aagagcaacg	tgggcgcttc	tgagagccac	480
gcagayctgc	ctatgaagac	actcaggaaac	aagatgggca	agtgggtgct	ccactgtctc	540
ccctgtcgca	gggggagcrg	caagagcaag	gtggcgcttc	ggggagacta	cgatgacagt	600
gccttcattg	akccccaggt	ccacgtccrt	ggagaagatc	tggaacaagc	ccacagagct	660
gcctggtggg	gtaaagtccc	cagaaaaggat	ctcatcgctc	tgctcagggc	cackgaygtg	720
aacaagargg	acaagcaaaa	gaggactgct	ctacatctgg	cctctgcca	tggaattca	780
gaagtgttaa	aactcstgct	ggacagacga	tgtaacatt	atgtccttga	caacaaaaag	840
aggacagctc	tgayaagcgt	cgtacaatgc	caggaagatg	aatgtgcgtt	aattgttgctg	900
gaacatggca	ctgatccaaa	tattccagat	gagtatggaa	ataccactct	rcactaygct	960
rtctayaatg	aagataaatt	aatggccaaa	gcactgctct	tatayggtgc	tgatatcgaa	1020
tcaaaaaacg	agcatggcct	cacaccactg	ytacttggtr	tacatgagca	aaacacgcaa	1080
gtsgtgaaat	ttttatyyaa	gaaaaaagcg	aattttaa	gcrctggata	gaatgggaag	1140
ractgctctc	atacttgctg	tatgttgtgg	atcagcaagt	atagtcagcc	ytctacttga	1200
gaagtaattt	gatgtattct	ctcaagatct	cgaaagacgg	ccagagagta	tgctgtttct	1260
atgtcatcatc	atgaattttg	ccagttactt	tctgactaca	aagaaaaaca	gatgttaaaa	1320
atctctctctg	aaaacagcaa	tccagaacaa	gacttaaaag	tgacatcaga	gggaaggtca	1380
caaaggctta	aaggaagtga	aaacagccag	ccagaggcat	ggaaactttt	aaatttaaac	1440
tttttggttta	atgttttttt	tttttgcttt	ataaatatta	gatagtccca	gaacaaaatwa	1500
ccatgagacg	taggttttga	gaatcaatag	attctttttt	taagaaatctt	ttggtcaggga	1560
ggcgtgtctc	acgcctgtaa	ttccagcacc	ttgagaggct	gaggtggcga	gtacacgaga	1620
tcaggagatc	gagaccatcc	tggtcaaac	ggtgaaaccc	catctctact	aaaaatacaa	1680

aaacttagct	gggtgtggtg	gcgggtgcct	gtagtccag	ctactcagga	rgctgaggca	1740
ggagaatgg	atgaaccgg	gggttgagg	ttgcagtga	ccgagatccg	ccactacact	1800
ccagcctggg	tgacagagca	agactctgtc	tcaaaaaaaa	aaaaaaaaaa	aaa	1853

<210> 370

<211> 2184

<212> DNA

<213> Homo sapien

<400> 370

ggcagcagaa	ttaaaaccct	cagcaaaaa	ggcatagaag	ggacatacct	taaagtaata	60
aaaaaccact	atgacaagcc	cacagccaac	ataatactaa	atggggaaaa	gttagaagca	120
ttctctctga	gaactgcaac	aataaataca	aggatgctgg	attttgtcaa	atgccttttc	180
tgtgtctgtt	gagatgctta	tgtgactttg	cttttaattc	tgtttatgtg	attatcacat	240
ttattgactt	gcctgtgtta	gaccggaaga	gctgggggtg	ttctcaggag	ccaccgtgtg	300
ttcggcgagc	ttcgggataa	cttgaggctg	catcactggg	gaagaaaacac	aytctgttgc	360
gtggtgctga	tggtcgagga	cagagcttca	gtgtggcttc	tctgcgactg	gctctcttgg	420
ggagtctctt	cttcatagtt	catccatatg	gctccagagg	aaaattatat	tattttgtta	480
tggatgaaga	gtattacgtt	gtgcagatat	actgcagtgt	cttcatctct	tgatgtgtga	540
ttgggtaggt	tccaccatgt	tgccgcagat	gacatgattt	cagtacctgt	gtctggctga	600
aaagtgtttt	tttggaaatg	gatatttgtg	tttctggatc	tcatcctctg	tgggtggaca	660
gctttctcca	ccttgcttga	agtgacctgc	tgtccagaag	tttggatgct	gaggagtata	720
ccatcgttga	tgcatctttc	atttctctga	tttcttcttc	cctggatgga	cagggggagc	780
ggcaagagca	acgtggggac	ttctggagac	cacaacgact	cctctgtgaa	gacgcttggg	840
agcaagaggt	gcaagtgggt	ctgccactgc	ttcccctgct	gcagggggagc	ggcaagagca	900
acgtgtctgc	ttggggagac	tacgatgaca	ggccttctat	ggatcccagg	taccacgttc	960
atggacaaga	tctggacaag	ctccacagag	ctgcctgggt	gggtaaagtc	cccagaaagg	1020
atctcatcgt	catgctcagg	gacacggatg	tgaacaagag	ggacaagcaa	aagaggactg	1080
ctctacatct	ggcctctggc	aatgggaatt	cagaagttagt	aaaaactgtg	ctggacagac	1140
gatgtcaact	taatgtcctt	gacaacaaaa	agaggacagc	tctgacaaa	gcctgatacat	1200
gccaggaaga	tgaatgtgct	ttaatgttgc	tggaaactgg	cactgatcca	aaatattccag	1260
atgagtattg	aaataccact	ctacactatg	ctgtctcaaa	tgaagataaa	ttaattggcca	1320
aagcactgct	cttatacggt	gctgatatcg	aatcaaaaaa	caagcatggc	ctcacaccac	1380
tgctacttgg	tatacatgag	caaaaaacagc	aagtgggtgaa	atttttaatc	aagaaaaaag	1440
cgaatttaaa	tgccgtggat	agatatggaa	gaactgctct	catacttgct	gtatgtttgtg	1500
gatcagcaag	tatagtcagc	cctctacttg	agcaaaatgt	tgatgtatct	tctcaagatc	1560
tggaaagcag	ccagagaggt	atgctgtttc	tagtcatcat	catgtaattt	gccagttact	1620
ttctgactac	aaagaaaaac	agatgttaaa	aatctcttct	gaaaaacagc	atccagaaca	1680
agacttaaa	ctgacatcag	aggaagagtc	acaaaggctt	aaaggaagtc	aaaacagcca	1740
gccagaggca	tggaaacttt	taaaatttaa	cttttggttt	aatgtttttt	ttttttgcct	1800
taataatatt	agatagtcct	aaatgaaatw	accatagaga	ctaggctttg	agcaataata	1860
gattcttttt	ttaagaatct	tttggctagg	agcgtgtgct	caagcctcta	attccagcac	1920
cttgagaggg	tgaggtgggg	agatcacagg	atcaggagat	cgagaccatc	ctggctaaca	1980
cgggtaaaac	ccatctctac	taaaaaataca	aaaaacttagc	tgggtgtggt	ggcgggtgac	2040
tgtagtccca	gctactcagg	argctgaggc	aggagaatgg	catgaaccgc	ggaggtggag	2100
gttgcaagtga	gccgagatcc	gccactacac	tccagcctgg	gtgcagagac	aagactctgt	2160
ctcaaaaaaa	aaaaaaaaaa	aaaa				2184

<210> 371

<211> 1855

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(1855)

<223> n = A,T,C or G

<400> 371

tgcacgcac	ggccagtgct	tgtgccacgt	acactgacgc	ccctcgagat	gtgcacgcgc	60
cacgcgcacg	ttgcacgcgc	ggcagcggt	tggtggctt	gtaacggctt	gcacgcgcac	120
gcgcgcgcgc	cataaccgct	agactggcct	gtaacggctt	gcagcgcgac	gcgcgcgcgc	180
cgtaacggct	tgactggcct	gtaacggctt	gcacgtgcac	gctgcacgcg	cgttaacggc	240
ttgctggcga	gtagcgcgct	tggttggtt	ttgcattt	tgctkggctk	ggcgttgkty	300
cttggattg	acgtctctcc	cttggatkg	cggttctcc	ttggatkgac	gtttctyty	360
tcgcgttct	ttgctggact	tgacctt	ttgctgggt	ttggacttcc	tttgggggtg	420
gctgggtggt	ttctggggg	gggkttgccc	ttctggggg	ggcgctgggk	gcggcccgag	480
ggcgctgggc	tttcccggg	tggtgtggg	tttctggg	gtgggtggg	ctgtgctggg	540
atccccctgc	tttgggtggc	agggttgac	ttttcttcc	aaacagattg	gaaccccgga	600
gtaacntgct	agttgggtgaa	actggttggt	agacgcgac	tgctggtact	actgtttctc	660
gtgctgttc	aaagcagatg	gtgctgagg	ttgattcaat	gcggcgctgt	cttctgtgta	720
agaagccatt	tggtctcagg	agcaagatgg	gcaagtggg	cgccactgct	tccccctgct	780
cagggggagc	ggcaagagca	acgtggggac	ttctggagac	cacaacgact	ctctgtgtaa	840
gacgcttggt	agcaagaggt	gcaagtggg	ctgcccactg	cttccccctg	tgacggggag	900
cggaagagc	aacgtggkcg	cttggggaga	ctacgatgac	agcgcttca	tggakccag	960
gtaccacgtc	ctrtggagaag	atctgggacaa	gctccacaga	gctgcgtgt	ggggtaaagt	1020
ccccagaag	gatctcatcg	tcagtctcag	ggacactgay	gtgaacaaga	rggacaagca	1080
aaagagctgc	gctctacatc	tggtctctgc	caatgggaat	tcagaagtgt	tacaaactcgt	1140
gctggacaga	cgatgtcaac	ttaatgtct	tgacaacaaa	aagaggacag	ctctgcacaa	1200
ggccctacaa	tgcaggaag	atgaatgtgc	gttaatgtg	ctggaacatg	cgactgatcc	1260
aaatattcca	gatgagatgc	gaataaccac	ctcacactat	gctgtctaca	atgaagataa	1320
attaatggcc	aaagcactgc	ctttatacgg	tgctgatct	gaatcaaaaa	acaaggtata	1380
gatctactaa	ttttactctc	aaaatactga	aatgcattca	ttttaacatt	gacgtgtgta	1440
agggccagtc	ttctcgattt	gggaagctcaa	gcataaactg	aatgaataat	tttgaagt	1500
accttaattat	ctaaagactt	attttaaata	ttgtattttt	caaagaagca	ttagagggtta	1560
cagttttttt	tttttaaatg	cacttctgtg	aaatactttt	gttgaaaaca	ctgaatttgt	1620
aaaaggtaat	acttactatt	tttcaatttt	tcctcctag	gatttttttc	ccctaagtaa	1680
tgtaagatgg	caaaatttgc	cttgaataag	gttttacatg	aaaactccaa	gaaaagttaa	1740
acatgtttca	gtgaatagag	atcctgctcc	tttggcaagt	tcctaaaaaa	cagttaataga	1800
tacgaggtga	tgcgctgtc	agtggcaagg	tttaagatat	ttctgatctc	gtgccc	1855

<210> 372

<211> 1059

<212> DNA

<213> Homo sapien

<400> 372

gcaacgtggg	cacttctgga	gaccacaacg	actcctctgt	gaagacgctt	gggagcaaga	60
gggtcaagtg	gtgctgccca	ctgcttcccc	tgctgcaggg	gagcgggcaag	agcaacgtgg	120
gcgcttggg	agactmcgat	gacagygctt	tcattggagcc	caggtaccac	ctccgtggag	180
aaagtctgga	caagctccac	agagctgccc	tggtggggta	aagtccccag	aaaggatctc	240
atcgtcagtc	tcaggggacac	tgaygtgaac	aaagarggaca	agcaaaaagag	gactgctcta	300
catctggcct	ctggccaatg	gaattcagaa	gtagtataac	tcstgctgga	cagacgatgt	360
caacttaagc	tccttgacaa	caaaaagagg	acagctctga	yaaagggcgt	acaaagccag	420
gaagtgaat	gtgctttaat	gttgctggaa	catggcactg	atccaaatat	tcagatgatg	480
tatggaaata	ccactctcca	ctaygctrtc	tayaatgaag	ataaataat	ggccaaagca	540
ctgctcttat	ayggtgctga	tatcgaatca	aaaaacaagg	tatagatcta	ctaattttat	600
cttcaaaata	ctgaaattgca	ttctatttaa	catgtgcgtg	tgtaaggcgt	atgatttcgt	660
atttggaaag	tcgaagcataa	cttgaatgaa	aatattttga	aatgacctaa	ttatctaaaga	720
ctttatttta	aatatttgta	ttttcaaga	agcattagag	ggtacagatt	ttttttttta	780
aatgaccttc	tggttaaatc	ttttgtgtaa	aacactgaat	ttgtaaaaag	taataactac	840
tatttttcaa	tttttccctc	ctaggatttt	tttcccccaa	tgaatgtaag	atggcaaaat	900
ttgcccgtga	ataggtttta	catgaaaact	ccaagaaaag	ttaaacatgt	ttcagtgaa	960
agagatcctg	ctctcttggc	aagttcctaa	aaaacagtaa	tagatacagag	gtgatgcgccc	1020
tgctcagtg	aaaggtttaag	atatttctga	ttctgctgac			1059

<210> 373
 <211> 1155
 <212> DNA
 <213> Homo sapien

<400> 373

atggttggttg	aggttgattc	catgccggct	gcctctctcg	tgaagaagcc	atttggcttc	60
aggagcaaga	tgggcaagt	gtgctgccgt	tgcttccctc	gctgcaggga	gagcggaag	120
agcaacgtgg	gcactctctg	agaccacgac	gactctgcta	tgaagacact	caggagcaag	180
atggggcaagt	ggcgccgccca	ctgcttcccc	tgctgcaggg	ggagtggcaa	gagcaacgtg	240
ggcgctcttg	gagaccacga	cgactctgct	atgaagacac	tcagggaacca	gatgggcaag	300
tggtgctgcc	actgcttccc	ctgctgcagg	gggagcgcca	agagcaaggt	gggcgcttgg	360
ggagactacg	atgacagtgc	cttcattggg	ccagggtacc	acgtccgtgg	agaagactcg	420
gacaagctcc	acagagctgc	ctggtggggg	aaagtcccca	gaaaggatct	catcgctcat	480
ctcagggaca	ctgacgtgaa	caagaaggac	aagcaaaaga	ggactgctct	acactctggc	540
ctctgccaatg	ggaattcaga	agtagtaaaa	ctcctgctgg	acagacgatg	tcaacttaat	600
gtccttgaca	acaaaaagag	gacagctctg	ataaaggcgg	tacaatgcc	ggaagatgaa	660
tggtcgctaa	tgttgctgga	acatggcaat	gatccaaata	ttccagatga	gtatggaaat	720
accactctgc	actacgctat	ctataatgaa	gataaattaa	tgcccaaagc	actgctctta	780
tatggtgctg	atatcgaaat	aaaaaacaag	catggcctca	caccactgtt	acttgggtga	840
catgagcaaa	aacagcaagt	cgtgaaattt	ttaatacaaga	aaaaagcgaa	tttaaatgca	900
ctggatagat	atggaaggac	tgctctcata	cttctgtgat	gttgggtgat	agcaagatga	960
gtcagctctc	tacttgagca	aaatattgat	gtatcttttc	aaagatctatc	tggaacagacg	1020
gccagagagt	atgctgtttc	tagtcatcat	catgtaattt	gccagttact	ttctgactac	1080
aaagaaaaac	agatgctaaa	aatctcttct	gaaaacagca	atccagaaaa	tgctctcaaga	1140
accagaataa	aataa					1155

<210> 374
 <211> 2000
 <212> DNA
 <213> Homo sapien

<400> 374

atggttggttg	aggttgattc	catgccggct	gcctctctcg	tgaagaagcc	atttggcttc	60
aggagcaaga	tgggcaagt	gtgctgccgt	tgcttccctc	gctgcaggga	gagcggaag	120
agcaacgtgg	gcactctctg	agaccacgac	gactctgcta	tgaagacact	caggagcaag	180
atggggcaagt	ggcgccgccca	ctgcttcccc	tgctgcaggg	ggagtggcaa	gagcaacgtg	240
ggcgctcttg	gagaccacga	cgactctgct	atgaagacac	tcagggaacca	gatgggcaag	300
tggtgctgcc	actgcttccc	ctgctgcagg	gggagcgcca	agagcaaggt	gggcgcttgg	360
ggagactacg	atgacagtgc	cttcattggg	ccagggtacc	acgtccgtgg	agaagactcg	420
gacaagctcc	acagagctgc	ctggtggggg	aaagtcccca	gaaaggatct	catcgctcat	480
ctcaggggaca	ctgacgtgaa	caagaaggac	aagcaaaaga	ggactgctct	acactctggc	540
ctctgccaatg	ggaattcaga	agtagtaaaa	ctcctgctgg	acagacgatg	tcaacttaat	600
gtccttgaca	acaaaaagag	gacagctctg	ataaaggcgg	tacaatgcc	ggaagatgaa	660
tggtcgctaa	tgttgctgga	acatggcaat	gatccaaata	ttccagatga	gtatggaaat	720
accactctgc	actacgctat	ctataatgaa	gataaattaa	tgcccaaagc	actgctctta	780
tatggtgctg	atatcgaaat	aaaaaacaag	catggcctca	caccactgtt	acttgggtga	840
catgagcaaa	aacagcaagt	cgtgaaattt	ttaatacaaga	aaaaagcgaa	tttaaatgca	900
ctggatagat	atggaaggac	tgctctcata	cttctgtgat	gttgggtgat	agcaagatga	960
gtcagctctc	tacttgagca	aaatattgat	gtatcttttc	aaagatctatc	tggaacagacg	1020
gccagagagt	atgctgtttc	tagtcatcat	catgtaattt	gccagttact	ttctgactac	1080
aaagaaaaac	agatgctaaa	aatctcttct	gaaaacagca	atccagaaaa	agacttaag	1140
ctgacatcag	aggaagagtc	acaaagggtc	aaaggcagtg	aaaatagcca	gccagagaaa	1200
atgtctcaag	aaccagaaat	aaataaggat	ggtgatagag	aggttgaaga	agaatatgag	1260
aagcatcgaaa	gtaataatgt	gggattacta	gaaaacctga	ctaattggtg	caactctggc	1320
aatggtgata	atggtattaat	tcctcaaagg	aagagcagaa	cacctgaaaa	tcagcaattt	1380
ctgcacaacg	aaagtgaaga	gtatcacaga	atttgcgat	tagttcttga	ctcaaaagaa	1440
aaacagatgc	caaaatactc	ttctgaaaac	agcaacccag	aacaagactt	aaagctgaca	1500

```
<210> 375
<211> 2040
<212> DNA
<213> Homo sapien
```

```
<210> 376
<211> 329
<212> PRT
<213> Homo sapien
```

<400> 376
Met Asp Ile Val Val Ser Gly Ser His Pro Leu Trp Val Asp Ser Phe

```

1           5           10           15
Leu His Leu Ala Gly Ser Asp Leu Leu Ser Arg Ser Leu Met Ala Glu
20           25           30
Glu Tyr Thr Ile Val His Ala Ser Phe Ile Ser Cys Ile Ser Ser Ser
35           40           45
Leu Asp Gly Gln Gly Glu Arg Gln Glu Gln Arg Gly His Phe Trp Arg
50           55           60
Pro Gln Arg Leu Leu Cys Glu Asp Ala Trp Glu Gln Glu Val Gln Val
65           70           75           80
Val Leu Pro Leu Leu Pro Leu Leu Gln Gly Ser Gly Lys Ser Asn Val
85           90           95
Val Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr
100          105          110
His Val His Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp
115          120          125
Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp
130          135          140
Val Asn Lys Arg Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser
145          150          155          160
Ala Asn Gly Asn Ser Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys
165          170          175
Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala
180          185          190
Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly
195          200          205
Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr
210          215          220
Ala Val Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr
225          230          235          240
Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu
245          250          255
Leu Gly Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys
260          265          270
Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu
275          280          285
Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu
290          295          300
Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu
305          310          315          320
Ser Met Leu Phe Leu Val Ile Ile Met
325

```

<210> 377

<211> 148

<212> PRT

<213> Homo sapien

<220>

<221> VARIANT

<222> (1)...(148)

<223> Xaa = Any Amino Acid

<400> 377

```

Met Thr Xaa Pro Ser Trp Ser Pro Gly Thr Thr Ser Val Glu Lys Ile
1           5           10           15
Trp Thr Ser Ser Thr Glu Leu Pro Trp Trp Gly Lys Val Pro Arg Lys
20           25           30
Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Xaa Asp Lys

```

35 40 45
 Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu
 50 55 60
 Val Val Lys Leu Xaa Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp
 65 70 75 80
 Asn Lys Lys Arg Thr Ala Leu Xaa Lys Ala Val Gln Cys Gln Glu Asp
 85 90 95
 Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro
 100 105 110
 Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Xaa Tyr Asn Glu Asp
 115 120 125
 Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser
 130 135 140
 Lys Asn Lys Val
 145

<210> 378
 <211> 1719
 <212> PRT
 <213> Homo sapien

<400> 378
 Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
 1 5 10 15
 Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
 20 25 30
 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
 35 40 45
 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
 50 55 60
 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
 65 70 75 80
 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
 85 90 95
 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
 100 105 110
 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
 115 120 125
 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
 130 135 140
 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
 145 150 155 160
 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
 165 170 175
 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
 180 185 190
 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
 195 200 205
 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
 210 215 220
 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
 225 230 235 240
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
 245 250 255
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
 260 265 270
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
 275 280 285

Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
 290 295 300
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
 305 310 315 320
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
 325 330 335
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
 340 345 350
 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
 355 360 365
 Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
 370 375 380
 Pro Arg Thr His Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser
 385 390 395 400
 Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys
 405 410 415
 Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly
 420 425 430
 Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys
 435 440 445
 Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly
 450 455 460
 Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys
 465 470 475 480
 Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys
 485 490 495
 Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp
 500 505 510
 Asp Ser Ala Phe Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu
 515 520 525
 Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp
 530 535 540
 Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln
 545 550 555 560
 Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val
 565 570 575
 Val Lys Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn
 580 585 590
 Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu
 595 600 605
 Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp
 610 615 620
 Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys
 625 630 635 640
 Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys
 645 650 655
 Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys
 660 665 670
 Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala
 675 680 685
 Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly
 690 695 700
 Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser
 705 710 715 720
 Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser
 725 730 735
 His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln
 740 745 750

Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys
 755 760 765
 Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser
 770 775 780
 Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp
 785 790 795 800
 Arg Glu Val Glu Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly
 805 810 815
 Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn
 820 825 830
 Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe
 835 840 845
 Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser
 850 855 860
 Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn
 865 870 875 880
 Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Ser Gln Arg Leu
 885 890 895
 Glu Gly Ser Glu Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile
 900 905 910
 Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn
 915 920 925
 Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro
 930 935 940
 Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu
 945 950 955 960
 Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe
 965 970 975
 Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His
 980 985 990
 Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser
 995 1000 1005
 Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu
 1010 1015 1020
 Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His
 1025 1030 1035 1040
 Gln Ser Gln Leu Pro Arg Thr His Met Val Val Glu Val Asp Ser Met
 1045 1050 1055
 Pro Ala Ala Ser Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met
 1060 1065 1070
 Gly Lys Trp Cys Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys
 1075 1080 1085
 Ser Asn Val Gly Thr Ser Gly Asp His His Asp Asp Ser Ala Met Lys Thr
 1090 1095 1100
 Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys
 1105 1110 1115 1120
 Arg Gly Ser Gly Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp
 1125 1130 1135
 Ser Ala Met Lys Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His
 1140 1145 1150
 Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp
 1155 1160 1165
 Gly Asp Tyr Asp Asp Ser Ala Phe Met Glu Pro Arg Tyr His Val Arg
 1170 1175 1180
 Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val
 1185 1190 1195 1200
 Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys
 1205 1210 1215

Lys Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly
 1220 1225 1230
 Asn Ser Glu Val Val Lys Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn
 1235 1240 1245
 Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys
 1250 1255 1260
 Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro
 1265 1270 1275 1280
 Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr
 1285 1290 1295
 Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp
 1300 1305 1310
 Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Val
 1315 1320 1325
 His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala
 1330 1335 1340
 Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala
 1345 1350 1355 1360
 Val Cys Cys Gly Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln Asn
 1365 1370 1375
 Ile Asp Val Ser Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr
 1380 1385 1390
 Ala Val Ser Ser His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr
 1395 1400 1405
 Lys Glu Lys Gln Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu
 1410 1415 1420
 Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly
 1425 1430 1435 1440
 Ser Glu Asn Ser Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn
 1445 1450 1455
 Lys Asp Gly Asp Arg Glu Val Glu Glu Glu Met Lys Lys His Glu Ser
 1460 1465 1470
 Asn Asn Val Gly Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly
 1475 1480 1485
 Asn Gly Asp Asn Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu
 1490 1495 1500
 Asn Gln Gln Phe Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys
 1505 1510 1515 1520
 Glu Leu Val Ser Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser
 1525 1530 1535
 Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu
 1540 1545 1550
 Ser Gln Arg Leu Glu Gly Ser Glu Asn Gly Gln Pro Glu Lys Arg Ser
 1555 1560 1565
 Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Leu Glu Asn Phe
 1570 1575 1580
 Met Ala Ile Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe
 1585 1590 1595 1600
 Pro Glu Asn Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly
 1605 1610 1615
 Leu Ile Pro Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro
 1620 1625 1630
 Asp Thr Glu Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln
 1635 1640 1645
 Lys Gln Phe Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile
 1650 1655 1660
 Leu Ile His Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser
 1665 1670 1675 1680

Glu Leu Ser Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn
 1685 1690 1695
 Ser Thr Leu Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr
 1700 1705 1710
 Met Lys His Gln Ser Gln Leu
 1715

<210> 379
 <211> 656
 <212> PRT
 <213> Homo sapien

<400> 379
 Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
 1 5 10 15
 Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
 20 25 30
 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
 35 40 45
 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
 50 55 60
 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
 65 70 75 80
 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
 85 90 95
 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
 100 105 110
 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
 115 120 125
 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
 130 135 140
 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
 145 150 155 160
 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
 165 170 175
 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
 180 185 190
 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
 195 200 205
 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
 210 215 220
 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
 225 230 235 240
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
 245 250 255
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
 260 265 270
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
 275 280 285
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
 290 295 300
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
 305 310 315 320
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
 325 330 335
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His Val
 340 345 350
 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile


```

355          360          365
Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
370          375          380
Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
385          390          395
Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
400
Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
415
Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
420
425
Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
435
440
445
Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
450
455
460
465
Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
470
475
480
Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
485
490
495
Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys
500
505
510
Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly
515
520
525
530
535
540
Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser
545
550
555
Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr
560
565
570
His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln
575
580
585
590
Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln
595
600
605
Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys
610
615
620
Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile
625
630
635
Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
640
645
650
655

```

<210> 380

<211> 671

<212> PRT

<213> Homo sapien

<400> 380

```

Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
1          5          10          15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
20          25          30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
35          40          45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
50          55          60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65          70          75          80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
85          90          95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
100          105          110

```

Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
 115 120 125
 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
 130 135 140
 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
 145 150 155
 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
 165 170 175
 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
 180 185 190
 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
 195 200 205
 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
 210 215 220
 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
 225 230 235
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
 245 250 255
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
 260 265 270
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
 275 280 285
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
 290 295 300
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Gly Ser Ala Ser Ile
 305 310 315
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
 325 330 335
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His Val
 340 345 350
 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
 355 360 365
 Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
 370 375 380
 Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
 385 390 395
 Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
 405 410 415
 Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
 420 425 430
 Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
 435 440 445
 Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
 450 455 460
 Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
 465 470 475
 Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
 485 490 495
 Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
 500 505 510
 Asn Gly Gln Pro Glu Lys Arg Ser Gln Glu Pro Glu Ile Asn Lys Asp
 515 520 525
 Gly Asp Arg Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys
 530 535 540
 His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly Ala
 545 550 555
 Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser Arg
 565 570 575

Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr His
 580 585 590
 Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn
 595 600 605
 Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile
 610 615 620
 Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys Lys
 625 630 635 640
 Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile Ala
 645 650 655
 Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
 660 665 670

<210> 381

<211> 251

<212> DNA

<213> Homo sapien

<400> 381

ggagaagcgt ctgctggggc aggaaggggt ttccctgcc tctcacctgt ccttcaccaa 60
 ggtaaatatgc ttccctaaag ggtatcccaa cccaggggcc tcacatgat cctctagggg 120
 ccaatatccc aggagaagca ttggggaggt gggggcaggt gaaggaccca ggaactcacac 180
 atcctgggcc tccaaggcag aggaaggggt cctcaagaag gtcaggagga aaatccgtaa 240
 caagcagca g 251

<210> 382

<211> 3279

<212> DNA

<213> Homo sapiens

<400> 382

cttctgcag ccccatgct ggtgaggggc acgggcagga acagtggacc caacatggaa 60
 atgctggagg gtgtcaggaa gtgatcgggc tctggggcag ggaggagggg tggggaggtg 120
 cactggggagg ggacatcctg cagaaggtag gagtgcagca acaccccgct caggggagggg 180
 gagagccctg cgccacctgg gggagcagag ggagcagcac ctgccccagg ctgggaggag 240
 cggcctggagg ggcgtgagga ggagcagagg ggtgcacatg ctggagtgag ggatcagggg 300
 gagggcgca gatggcctca cacagggaag agaggggccc tctgcagggg cctcacctgg 360
 gccacaggag gacactgctt ttctctctag gagtgcaggag ctgtggtatg tgctggagca 420
 aagaaggaca ggcctctggct caggtgtcca gaggctgtcg ctggcttccc ttggggatca 480
 gactgcaggg agggaggcgc gcagggttgt ggggggagtg acgatgagga tgacctgggg 540
 gtggctccag gccctggccc tgcctggggc ctacccagc ctccctcaca gtctctggc 600
 cctcagcttc tccctccac tccatctccc atctggcctc agtgggtcat tctgatcact 660
 gaactgacca taccagcccc tgcacaagcc cctccatggc tcccaatgc cctggagagg 720
 ggacatctag tcagagagta gtctgaaga ggtggcctct gcgatgtgac ttgtgggggca 780
 gcacatctgca gatggtcccg gccctcatcc tgcagacctg tctgcaggga ctgtcctcct 840
 ggacccctggc ccttctgcag gactgggacc ctgaagtcct ctcccacatg gccaaagact 900
 gagccttgtt cccctctgtg gactccctgc coactattctt gtgggagtggt gttctggaga 960
 catttctgtc tgttctctgag agctgggaat tgcctcagct catctgcctg cgcggttctg 1020
 agagatggag ttgcctaggc agttattggg gccaatcttt ctcaactgtg ctctcctcct 1080
 ttacccttag ggtgattctg ggggtccact tgtctgtaat ggtgtgcttc aaggtatcac 1140
 atcatggggc cctgagccat gtgccctgcc tgaaaagcct gctgtgtaca ccaaggtggt 1200
 gcattaccgg aagtggatca aggacaccat cgcagccaac cctgagtgcc cctgtccca 1260
 cccctaccct tagtaaatatt aagtcacact cactgtctg catcactggc ctttcttgga 1320
 tgctggacac ctgaagcttg gaactcacct ggocgaagct cgagcctcct gagtccact 1380
 gacctgtgct ttctgtgtg gagtccaggg ctgctaggaa aaggaatggg cagacacagg 1440
 tgtatgccaa tgttctgaa atgggtataa ttctgtctc tccctcgaa cactggctgt 1500
 ctctgaagac ttctcgtca gtttcaagta ttctgtctc tccctcgaa cactggctgt 1560
 tgttctgtgg gtgcagagat gggaggggtg gggccacccc tggaagagtg gacagtga 1620

Glu Leu Thr Ile Pro Ser Pro Ala His Gly Pro Pro Trp Leu Pro Asn
 130 135 140

Ala Leu Glu Arg Gly His Leu Val Arg Glu
 145 150

<210> 384
 <211> 557
 <212> DNA
 <213> Homo sapiens

<400> 384
 ggatcctcta gagcgccgc ctactactac taatttcgcg gccgcgtcga cgaagaagag 60
 aaagatgtgt ttgttttgg actctctgtg gtcccttcca atgctgtggg ttccaacca 120
 ggggaagggt ccccttttga ttgccaagtg ccataccat gagcactact ctaccatggt 180
 tctgcccctt ggccaagcag gctgttttgc aagaatgaaa tgaatgattc tacagctagg 240
 acttaacctt gaaatgaaa gtcttgcaat ccattttgca ggatccgtct gtgcacatgc 300
 ctcttagag agcagcattc ccagggaact tggaaacagt tggcactgta aggtgcttgc 360
 tcaccaagac acatcctaaa aggtgttgta atggtgaaaa cgtcttcctt ctttattgac 420
 cctcttatt tatgtgaaca actgtttgtc tttttttgta tcttttttaa actgtaaaagt 480
 tcaattgtga aatgaatat catgcaata aattatgcga ttttttttcc aaagtaaaaa 540
 aaaaaaaaaa aaaaaaa 557

<210> 385
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 385
 ttcccaaggt atgtgcgagg gaagacacat ttactatcct tgatggggct gattccttta 60
 gtttctctag cagcagatgg gttaggagga agtgacccaa gtggttgact cctatgtgca 120
 tctcaagacc atctgctgtc ttgcagtagc gacacatcat cactcctgca ttgttgatca 180
 aaacgtggag gtgcttttcc tcaagtaaga agcccttagc aaaagctcga atagacttag 240
 tatcagacag gtccagtttc cgcaccaaca cctgctgggt cctgtgctg gtctggatct 300
 ctttggccac caattccccc ttttccacat ccggga 337

<210> 386
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 386
 gggcccgcta ccggcccagg ccccgccctc cagtcctctc tcccggggt cctgcccga 60
 gcccgctcgg ccagagggt gggcgcgggg ctgcctctac cggctggcgg ctgttaactca 120
 gcgaccttgg ccgaaggct ctagcaagga ccaaccgacc ccagcccgcg cggcgccggc 180
 gcggactttg ccgggtgtgt gggcgcgagc ggactgcgtg tccgcggacg ggcagcgaag 240
 atgttagcct tctgtccag gaccgtggac cgatcccgag gctgtgtgtt aaactcagcc 300

<210> 387
 <211> 537
 <212> DNA
 <213> Homo sapiens

<400> 387
 gggccgagtc gggcaccagg ggactctttg caggcttctt tctcgggata atcaaggctg 60
 cccctcctg tgccatcatg atcagcaact atgagttcgg caaaagcttc ttccagaggc 120

```

tgaaccagga cgggctcttg ggcggctgaa aggggcaagg aggcaaggac cccgtctctc 180
ccacggatgg ggagagggca ggaggagacc cagccaagtg cctttctctc agcactgagg 240
gagggggcgt gtttcccttc cctccggcgg ggcagggcgt gtccctctgg 300
ggggcccaagc acttctctcag acacaaacttc ttctctgctgc tccagtctgt ggggacatca 360
cttaccaccac ccccaagttc aagaccaaat ctccaagctg cccctctctg gtttccctgt 420
gtttgctgta gctgggcatg tctccaggaa ccaagaagcc ctccagctgg tgtagtctcc 480
ctgacccttg ttaattcctt aagtctaaag atgatgaact tcaaaaaaaa aaaaaaa 537

```

<210> 388

<211> 520

<212> DNA

<213> Homo sapiens

<400> 388

```

aggataattt ttaaaccaat caaatgaaaa aaacaaacaa acaaaaaagg aaatgtcatg 60
tgaggttaaa ccagtttgcg ttccctaat gtggaaaaag taaggaggact actcagcact 120
gtttgaagat tgctctcttc acagctcttg agaattgtgt tatttcaact gccaaagtga 180
ggaccctctc ccacactgc cccagccca cctaagcat ggtccttctg caccaggcaa 240
ccaggaaact gctacttctg gaacctacca gagaccagga ggggttgggt agctcacagg 300
acttccccca cccagagaaga ttagcatccc atactagact catactcaac tcaactaggc 360
tcatactcaa ttgatggtta ttgacaatt ccatttcttt ctggttatta taaacagaaa 420
atcttctctc ttctcattac cagtaaaagg tcttggtatc ttctgttggg aatgattctc 480
atgaacttgt cttattttaa tgggtgggtt tttttctggt 520

```

<210> 389

<211> 365

<212> DNA

<213> Homo sapiens

<400> 389

```

cgttgcccca gtttgacaga aggaaggcgg gaggcttattc aaagtctaga gggagtggag 60
gagttaaagg tggatttcag atctgcctgg ttccagcgcg agtgtgcctc ctgctcccc 120
aacgactttc caaataatct caccagcgcc ttccagctca ggcgtctcag aagcgtcttg 180
aagcctatgg ccagctgtct ttgtgttccc tctcaccgcg ctgtctctac agctgagact 240
cccaggaaac cttcagacta ccttctctct ccttcagcaa ggggcgttgc ccacattctc 300
tgagggtcag tggaagaacc tagactccca ttgctagagg tagaaaaggg aagggtgctg 360
gggag

```

<210> 390

<211> 221

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(221)

<223> n = A, T, C or G

<400> 390

```

tgctctccca tcttgcccc gaattctctg tcaggaaagt ggggatggac cccatctgca 60
tacacgnttc ctcatgcttg tggaacatct ctgcttgcgg ttccagggaag gctctgtggt 120
gctctangag tctgancnga ntcgttgccc cantntgaca naaggaaagg cggagcttat 180
tcaaagtcta gagggagtgg aggagttaag gctggatttc a

```

<210> 391

<211> 325

<212> DNA

<213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(325)
 <223> n = A,T,C or G

```
<400> 391
tggagcaggt cccgaggcct ccctagagcc tggggccgac tctgtgncga tgcangcttt 60
ctctcgcgcc cagcctggag ctgctcctgg catctaccaa caatcagncg aggcgagcag 120
tagccagggc actgctgcca acagccagtc cnnataccat catgtnaccc ggtgngctct 180
naantngat ntccanagcc ctaccccatn tagttctgct ctcccacgg ntaccagccc 240
cactgcccag gaactctaca gccagtacc tgtcccagc tctctacctt ccagtagcat 300
gagacctcgg gctactacta tgacc                                     325
```

<210> 392
 <211> 277
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(277)
 <223> n = A,T,C or G

```
<400> 392
atatgtttta actccttctt ttatatcttt taacattttc atggngaaag gtccacatct 60
agtcctcaatt nggcnagngn ctctacttgg agtcctctcc ccggcctgmn ccagatngnaa 120
antaccangaa accgncatgn cttanaaaacn nctgtgtttn tgggttnntc atgactgca 180
tgacgtgcac caccctgtcc actacgtgat gctgtaggat taaagtctca cagtgggggg 240
ctgagatatac agcgccgcgt cctgtgttgc tggggaa                                     277
```

<210> 393
 <211> 566
 <212> DNA
 <213> Homo sapiens

```
<400> 393
actagtcacg tgtgttgaa ttcgcggccg cgtcgacgga caggtcagct gtcctggctca 60
gtgactacaa tctctgaagt gtctgaaaat gtcttcata tttaaattcag cctaaacggt 120
ttgcggggaa cactgcagag acaatgtgct gagtttccaa ccttagccca tctgcggggca 180
gagaaggtct agtttgtcca tcagcattat catgatata ggaactggta cttggttaa 240
gaggggtcta ggagatctgt cctctttaga gacacctac ttataatgaa gtatttggga 300
gggtgggttt caaaagtaga aatgtcctgt attccgatga tcactctgta aacattttat 360
catttaataa tcactccctgc ctgtgtctat ttatatattc atatctctac gctggaaact 420
ttctgcctca atgtttactg tgccctttgt tttgtagtt tgtgtgtgtg aaaaaaaa 480
cattctctgc ctgaggttta attttgtcc aaagttatt taactctaac aattaaaagc 540
ttttgcctat caaaaaaaaa aaaaaa                                     566
```

<210> 394
 <211> 384
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(384)
 <223> n = A,T,C or G

```

<400> 394
gaacatacat gtccgggcac ctgagctgca gctgacatc atcgccatca cgggectcgc 60
tgcaaatnng gaccgggcca aggctggact gctggagcgt gtgaaggagc tacaggccna 120
gcaggaggac cgggctttaa ggagttttaa gctgagtgct actgtagacc ccaaatacca 180
tcccaagatt atcggggagaa agggggcagt aattacccaa atccggttgg agcatgacgt 240
gaacatccag tttcttgata aggacgatgg gaaccagccc caggaccaaa ttaccatcac 300
agggtacgaa aagaacacag aagctgccag ggatgctata ctgagaattg tgggtgaact 360
tgacagatg gtttctgagg acgt 384

```

```

<210> 395
<211> 399
<212> DNA
<213> Homo sapiens

```

```

<400> 395
ggcaaaactg tgtgacctca ataagacctc gcagatccaa ggtcaagtat cagaagtgc 60
tctgaccttg gactccaaga cctacatcaa cagcctggct atattagatg atgagccagt 120
tatcagaggt ttcattcattg cggaaattgt ggagtctaa gaaatcatgg cctctgaagt 180
attcagctct ttcagatacc ctgagttctc tatagagttg cctaacacag gcagaattgg 240
ccagctactt gtctgcaatt gtatcttcaa gaataccctg gccatccctt tgactgacgt 300
caagtctctc ttggaaagcc tgggcatctc ctactacag acctctgacc atgggacggt 360
gcagcctggt gagaccatcc aatcccaaat aaaatgcac 399

```

```

<210> 396
<211> 403
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(403)
<223> n = A,T,C or G

```

```

<400> 396
tggagttntc agtgcaaaac agccataaag ctctcagtagc aaattactgt ctccacagaaa 60
gacattttca acttctgctc cagctgctga taaaacaaat catgtgttta gcttgactcc 120
agacaaggac aacctgttcc ttcataaact tctagagaaa aaaaggagtt gttagttagt 180
actaaaaaaa gtggatgaat aatctggata ttttctctaa aaagattcct tgaaacacat 240
taggaaaaatg gagggcctta tgatcagaat gctagaatta gtccattgtg ctgaagcagg 300
gtttagggga gggagtgagg gataaaagaa ggaaaaaaag aagagtgaga aaacctattt 360
atcaaacgag gtgctatcac tcaatgttag gccctgctct ttt 403

```

```

<210> 397
<211> 100
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(100)
<223> n = A,T,C or G

```

```

<400> 397
actagtnacg tgtggtggaa ttccgggccg cgtcgacctt naanccatct ctatagcaaa 60
tccatccccg ctctcgttgg gtnacagaat gactgacaaa 100

```

```

<210> 398
<211> 278

```


<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(278)
<223> n = A,T,C or G

<400> 398
gcgggcgcgt cgacagcagt tccgccagcg ctcccccctg ggtggggatg tgcctgcacgc 60
ccacctggac atctggaagt cagcggcctg gatgaaagag cggacttcac ctggggcgat 120
tcactactgt gcctcgacca gtgaggagag ctggaccgac agcgagggtg actcatcatg 180
ctccgggcag cccatccacc tgtggcagtt cctcaaggag ttgctactca agccccacag 240
ctatggcgcc ttcatlangt ggctcaaca ggagaagg 278

<210> 399
<211> 298
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(298)
<223> n = A,T,C or G

<400> 399
acggagggtg aggaagcgnc cctgggatcg anaggatggg tccatgncatt gaccncctcn 60
ggggtgcncg catggagcgc atgggcgcgg gcctgggcca cggcatggat cgcgtgggct 120
ccgagatcga gcgcgatggc ctggctcatgg accgcgatgg ctccgtggag cgcgatggct 180
ccggcattga gcgcgatggc ccgctgggccc tcgaccacat ggccctccanc attgancgca 240
tgggcagac catggagcgc attggctctg gcgtggagcn catgggtgcc ggcctggg 298

<210> 400
<211> 548
<212> DNA
<213> Homo sapiens

<400> 400
acatacaacta cttcctcatt ttaaggatg gaagttccct tcatccctt ttcctgcctt 60
gtacatgtac atgtatgaaa ttctcttctc ttaccgaact ctctccacac atcacaaagt 120
caaagaacca cagcgttaga agggtaaagag ggcaccctat gaaatgaaat ggtgatttct 180
tgagtctctt ttttccacgt ttaaggggccc atggcaggac ttagagttgc gagttaagac 240
tgcaagagggc tagagaatta ttccatacag gctttgaggc caccocatgct acttatcccg 300
tataccctct caccatcccc ttgtctactc tgatgccccc aagatgcaac tgggcagcta 360
gtttggcccca taattctggy cctttgttgg ttgttttaat tacttgggca tccacaggaag 420
ctttccagtg atctctacc atggggccccc ctccggggat caagccctc ccaggccctg 480
tcccagcgcc ctctgcgcc agcccaacccg cttgccttgg tgetcagccc tccatttggg 540
agcaggtt

<210> 401
<211> 355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

```

<400> 401
actgtttcca tgttatgttt ctacacattg ctacctcagt gctcctggaa acttagcttt 60
tgaatgtccc aagtagtcca ccttcattta actctttgaa actgtatcat ctttgccaag 120
taagagtggg ggctattttc agctgctttg acaaaatgac tggctcctga cttaacgttc 180
tataaatgaa tggctgtaag caaagtgcc atggtggcgg cgaagaagan aaagatgtgt 240
ttgttttgg actctctgtg gtcccttcca atgctgnggg ttcccaacca ggggaagggt 300
cccttttga ttgccaagtc ccataaccat gagcactact ctaccatggn tctgc 355

```

```

<210> 402
<211> 407
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(407)
<223> n = A,T,C or G

```

```

<400> 402
atggggcaag ctggataaag aaccaagacc cactggagta tgctgtcttc aagaaccaca 60
tctcacatgc ggtggcatat ataggctcaa aataaaggaa tggagaaaaa tatttcaagc 120
aaatggaaaa cagaaaaaag caggtgttgc actcctactt tctgacaaaa cagactatgc 180
gaataaagat aaaaaagaga aggcatttac aaagtggtgc ctgacctttg ataatctca 240
ttgcttgata ccaacctggg ctgttttaac tgcccaaac aaagagataa tttgctgagg 300
ttgtggagct tctccctgc agagagtccc tgatctcca aaatttggtt gagatgtaa 360
gntgattttg ctgacaactc cttttctgaa gttttactca ttccaa 407

```

```

<210> 403
<211> 303
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

```

```

<400> 403
cagttattat agccnaactg aaaagctagt agcaggcaag tctcaaatcc aggaccacaa 60
tcctaagcaa gaggcatggc atggtgaaaa tgcaaaagga gagtctggcg aatctacaaa 120
tagagacaaa gaactactca gtcatagaac aaaggcaga caccacacatg atctcatggt 180
gggattggat attgtaatta tagagcagga agatgacagt gatcgctatt tggcacaaca 240
tcctaacaac gaccgaaacc cattatttac ataaacctcc attcggtaac catgttgaaa 300
gga 303

```

```

<210> 404
<211> 225
<212> DNA
<213> Homo sapiens

```

```

<400> 404
aagtgtaaact tttaaaaatt tagtggattt tgaaaattct tagaggaag taaaggaaaa 60
attgttaagt cactcattta cctttacatg gtgaaagttc tctctgtatc ctacaacag 120
acattttcca ctctgttttc catagtgttt aagtgtatca gatgtgttg gcatgtgaa 180
ctccaagtgc ctgtgtaata aataaagtat ctttatitca ttcac 225

```

```

<210> 405

```

```

<211> 334
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(334)
<223> n = A,T,C or G

<400> 405
gagctgttat actgtgagtt ctactaggaa atcatcaaat ctgagggttg tctggaggac 60
ttcaatacac ctccccccat agtgaatcag cttccagggg gtccagtcct tctccttact 120
tcattccccat cccatgccaag aggaagaccc tcctcctctg gtccacagcc ttctctagcg 180
ttcccaagtgc ctccaggaca gagggtggtta tgttttcagc tccatccttg ctgtgagtg 240
ctgggtcggtg tgtgcctcca gcttctgctc agtgcttcat ggacagtgtc cagcccatgt 300
cactctccac tctctcanng tggatcccac ccct 334

<210> 406
<211> 216
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(216)
<223> n = A,T,C or G

<400> 406
tttcatacct aatgaggagg ttganatnac atnnaaccag gaaatgcatg gatctcaang 60
gaaacaaaca cccaataaac tcggagtggc agactgacaa ctgtgagaca tgcacttgct 120
acnaaacaca aatttnatgt tgcacccttg tttctacacc tgtgggttat gacaaagaca 180
actgcctaac aatnttcaag aaggaggact gccant 216

<210> 407
<211> 413
<212> DNA
<213> Homo sapiens

<400> 407
gctgacttgc tagtatcatt tgcattcatt gaagcacaag aacttcattgc cttgactcat 60
gtaaatgcaa taggattaaa aaataaattt gatatcacat ggaacacagac aaaaaatatt 120
gtacaacatt gcaccacagt tcagatttcta cacctggcca ctgaggaagc aagagttaat 180
cccagaggtc tatgtccttaa tgtgttatgg caaatggatg tcatgcacgt accttcatt 240
ggaaaattgt catttgtcca tgtgacagtt gatatttatt cacatttcat atgggcaacc 300
tgccagacag gagaaagtct tccatgttta aaagacattt attatcttgt ttctctgtca 360
tgggagttcc agaaaaagtt aaaacagaca atgggcccagg ttctgtagta aag 413

<210> 408
<211> 183
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(183)
<223> n = A,T,C or G

<400> 408

```

```
ggagctngcc ctcaattcct ccatntctat gttancatat ttaatgtctt ttgnnattaa 60
tntttaacta gtttaactct aaaggcctan ntaatcctta actagtcctt ccattgtgag 120
cattatcctt ccagtattcn ccttctnttt tatttactcc ttctgggcta cccatgtact 180
ntt 183
```

```
<210> 409
<211> 250
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(250)
<223> n = A,T,C or G
```

```
<400> 409
ccacgcgatg ataagctctt tatttctgta agtcctgcta ggaaatcctc aaatctgaag 60
gtggtttggg ggacctgaac aaacctcctg taattaatca gctttcagtt tctccccccta 120
gtccctcctt caacaacata ggaggatcct cccctctctt ctgctcacgg ccttatctag 180
gcttcaccgt gcccccagga cagcgtgggc tatgtttaca ggcctcctt gctggggggg 240
ggcctatgac 250
```

```
<210> 410
<211> 306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(306)
<223> n = A,T,C or G
```

```
<400> 410
ggctggtttg caagaatgaa atgaatgatt ctacagctag gacttaacct tgaaatggaa 60
agtctttgcaa tccattttgc aggatccgtc tgtgcacatg cctctgtaga gagcagcatt 120
cccagggacc ttggaacacg ttggcactgt aagggtgctt ctccccaaga cacatcctaa 180
aagggtgttg aatggtgaaa accgcttctt tctttattgc cccctcttat ttatgtgaac 240
nactggtttg ctttttttgn atctttttta aactggaaag ttcaattgng aaaatgaata 300
tcntgc 306
```

```
<210> 411
<211> 261
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(261)
<223> n = A,T,C or G
```

```
<400> 411
agagatattn cttaggtnaa agttcataga gttcccatag actatatgac tggccacaca 60
ggatcttttg tattttaaggaa ttctgagatt ttgcttgagc aggattagat aaggctgttc 120
tttaaatgtc tgaaatggaa cagatttcaa aaaaaaaccc cacaatctag ggtggggaaca 180
aggaaggaaa gatgtgaata ggctgatggg caaaaaacca atttaccat cagtccacg 240
cttctctcaa ggnaggagcaa a 261
```

```
<210> 412
```

<211> 241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(241)
<223> n = A,T,C or G

<400> 412
gttcaatggt acctgacatt tctacaacac cccactcacc gatgtattcg ttgcccagtg 60
ggaacatacc agcctgaatt tggaaaaaat aattgtgttt cttgccacag aaatactacg 120
actgactttg atggctccac aaacataacc cagtgtaaaa acagaagatg tggaggggag 180
ctgggagatt tcaactggga cattgaattc ccaactacc cangcaatta ccagccaac 240
a 241

<210> 413
<211> 231
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(231)
<223> n = A,T,C or G

<400> 413
aaactttaca atccaagtga ctcatctgtg tgcttgaatc ctttccactg tctcatctcc 60
ctcatccaag ttctctagta ctctcttttg ttgtgaagga taatcaaat gaacaacaaa 120
aagtttaact tctctatttg gaacctaaaa actctcttct tctctgggtc aggaggtcca 180
agaatccttg aatcanttct cagatcattg gggacaccan atcaggaacc t 231

<210> 414
<211> 234
<212> DNA
<213> Homo sapiens

<400> 414
actgtccatg aagcactgag cagaagctgg aggcacaacg caccagacac tcacagcaag 60
gatggagctg aaaacataac ccactctgtc ctggaggcac tgggaagcct agagaaggct 120
gtgagccaag gagggagggt ctctcttttg catgggatgg ggaatgaagta aggagggga 180
ctggagcccc tgggaagtga ttcactatgg ggggaggtgt attgaagtcc tcca 234

<210> 415
<211> 217
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(217)
<223> n = A,T,C or G

<400> 415
gcataggatt aagactgagt atcttttcta cattctttta actttctaag gggcactttc 60
caaaaacag accaggtagc aaatctccac tgctctaagg ntctcaccac cactttctca 120
cacttagcaa tagtagaatt cagtcctact tctgaggcca gaagaatggt tcagaaaaat 180
antggattat aaaaaataac aattaagaaa aataatc 217

<210> 416
<211> 213
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(213)
<223> n = A,T,C or G

<400> 416
atgcataatnt aaagganact gcctcgcttt tagaagacat ctggngctgct ctctgcgatga 60
ggcacagcag taaagctctt tgattcccag aatcaagaac tctccccttc agactatttac 120
cgaatgcaag gtggttaatt gaaggccact aattgatgct caaatagaag gatattgact 180
atattggaac agatggagtc tctactacaa aag 213

<210> 417
<211> 303
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

<400> 417
nagttcttcag gcccatcagg gaagttcaca ctggagagaa gtcatacata tgtactgtat 60
gtgggaaagg ctttactctg agttcaaatc ttcaagccca tcagagagtc cacactggag 120
agaagccata caaatgcaat gagtgtggga agagcttcaag gagggtattcc cattatacag 180
ttcatctagt ggtccacaca ggagagaaac cctataaatg tgagatattgt ggggaagggtc 240
tcantcaaag ttcgatatctt caaatccatc ngaaggncca cagtatanan aaacctttta 300
agt 303

<210> 418
<211> 328
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 418
tttttggcgg tgggtgggca gggacgggac angagtctca ctctgttgcc caggctggag 60
tgcacaggca tgatctcgcc tcactacaac cctgctctcc catgtocaag cgattcttgt 120
gcctcagcct tcctgtgagc tagaattaca ggcacatgcc accacaccca gctagttttt 180
gtatttttag tagagacagg gtttcacat gttggccagg ctggtctcaa actcctnacc 240
tcagnggtca ggcgtggtctc aaactcctga cctcaagtga tctgcccacc tcagcctccc 300
aaagtgtctan gattacaggc cgtgagcc 328

<210> 419
<211> 389
<212> DNA
<213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(389)
 <223> n = A,T,C or G

<400> 419
 ctcctcaag acggcctgtg gtcgcctccc cggaaccaa gaagcctgca gtgccatag 60
 acccctgagc catggaactg agcctgaaag gcagcgtaca cctgtctcct gatcttgctg 120
 cttgtttcct ctctgtggct ccattccatag cacagttgtt gcactgaggc ttgtgcaggc 180
 cgagcaaggc caagctggct caaagaccaa ccagtcaact ctgccacggg gtgccaggca 240
 ccggttctcc agccaaccaac ctcaactcgt ccgcaaatg gcacatcagt tctttacccc 300
 taaaggttag accaaagggc atctgctttt ctgaagtcct ctgctctatc agccatcacg 360
 tggcagccac tcngctgtg tcgacgcgg 389

<210> 420
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 420
 gttcctccta actcctgcca gaaacagctc tcctcaacat gagagctgca cccctccctc 60
 tggccaaggc agcaagcctt agccttggct tcttgtttct gctttttttc tggctagacc 120
 gaagtgtact agccaaggag ttgaagtgtt tgactttggt gtttcggcat ggagaccgaa 180
 tcctcattga ccacctttccc actgacccca taaaggaaat ctcatggcca caaggatttg 240
 gccaaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaga 300
 gatatagaaa attcttgaat gagtcttata aacatgaaca ggtttatatt cgaagcacag 360
 acgttgaccg gactttgatg aagtgcctatg acaaaccttg caagcccg 408

<210> 421
 <211> 352
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(352)
 <223> n = A,T,C or G

<400> 421
 gctcaaaaaa ctttttactg atnggcattg ctacacaatc attgactatt acggaggcca 60
 gaggagaatg aggcctggcc ttggagccct gtcctacta naagcacatt agattatcca 120
 ttcaactgaca gaacaggtct tttttgggtc ctctcttccc accacnatac acttgcaatc 180
 ctctcttttg aagattcttt ggcagttgtc ttgtcataa ccacacaggt tagaacaaga 240
 ggtgcaacat gaaattcttg ttctgtagca agtgcatgtc tcacaagttg gcangctgcg 300
 cactccgagt ttattgggtg ttgtttctc ttgagatcca tgcaattcct gg 352

<210> 422
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 422
 atgccaccat gctggcaatg cagcgggcgg tcgaaggcct gcataccag cccaagctgg 60
 cgatgatcga cggcaaccgt tgcccgaagt tgccgatgcc agccgaagcg gtggtcaagg 120
 gcgatagcaa ggtgccggcg atcgccggcg cgtcaatcct ggccaaggtc agccgtgatc 180
 gtgaaattgc agctgtcgaa ttgatctacc cgggttatgg catcggcggg cataagggct 240
 attccgacac ggtgcacctg gaagccttgc agcggcgtgg gccgacgcg attcaccgac 300
 gcttcttcgg ccggtacgac tggcctatga aaattat 337

<210> 423
<211> 310
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(310)
<223> n = A,T,C or G

<400> 423
gctcaaaaat ctttttactg atatggcatg gctacacaat cattgactat tagaggccag 60
aggagaatga gccctggcct gggagccctg tgcctactan aagcncatta gattatccat 120
tcactgacag aacagggtctt ttttgggtcc tctcttcca ccacgatata ttgcaagtcc 180
tccttcttga agattctttg gcagttgtct ttgtcataac ccacaggtgt anaacaagg 240
gtgcaacatg aaatttctgt ttctgtagcaa gtgcatgtct cacagttgtc aagtctgccc 300
tcgagttta 310

<210> 424
<211> 370
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(370)
<223> n = A,T,C or G

<400> 424
gctcaaaaat ctttttactg ataggcatg ctacacaatc attgactatt agaggccaga 60
ggagaatgag gccctggcctg ggagccctgt gcctactaga agcacattag attatccatt 120
cactgacaga acagggtcttt tttgggtcct tcttctccac cagcatatac ttgcaagtcc 180
ccttcttgaa gattcttttg cagttgtctt tgtcataacc cacaggtgta gaaacatcct 240
ggttgaatct cctggaactc cctcattagg tatgaaatag catgatgcat tgcataaagt 300
cacgaagggt gcaaaagatca caacgctgcc cagganaaca ttcattgtga taagcaggac 360
tcggtcgagc 370

<210> 425
<211> 216
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(216)
<223> n = A,T,C or G

<400> 425
aattgctatn nttttatttg ccactcaaaa taattaccaa aaaaaaaaaa tnttaaatga 60
taacaacnca acatcaaggn aananaaca ggaatggntg actntgcata aatnggccga 120
anattatcca ttatnttaag ggttgacttc aggntacagc acacagacaa acatgccccag 180
gaggnntnca ggaccgctcg atgtntntg aggagg 216

<210> 426
<211> 596
<212> DNA
<213> Homo sapiens


```

<400> 426
cttcagtgga ggataaccct gttgccccgg gccgagggtc tccattaggc tctgattgat 60
tggcagtcag tgatggaagg gtgtctctgat cttccgact gccccaaggg tcgctggcca 120
gctctctgtt ttgctgagtt ggcagtagga cctaatttgt taattaagag tagatggtga 180
gctgtccctg tattttgatt aacctaatgg ccttcccagc acgactcgga ttcagctgga 240
gacatcacgg caacttttaa tgaaatgatt tgaaggggcca ctcccggtta 300
ttaggcagtt catctgcact gataacttct tggcagctga gctggtcgga gctgtggccc 360
aaacgcacac ttggcttttg gttttgagat acaactctta atcttttagt catgcttgag 420
gggtggatggc cttttcagct ttaacccaat ttgcactgcc ttggaagtgt agccaggaga 480
atacaactcat atactcgtgg gcttagaggc cacagcagat gtcattggtc tactgcctga 540
gtcccgtcgg tcccatccca ggacctcca tcggcgagta cctgggagcc cgtgct 596

```

```

<210> 427
<211> 107
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(107)
<223> n = A, T, C or G

```

```

<400> 427
gaagaattca agttaggttt attcaaaggc cttacnaga atcctanacc caggngccag 60
cccggagaca gccttanaga gctcctgttt gactgcccg gctcagng 107

```

```

<210> 428
<211> 38
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(38)
<223> n = A, T, C or G

```

```

<400> 428
gaacttcena anaangactt tattcactat ttacatt 38

```

```

<210> 429
<211> 544
<212> DNA
<213> Homo sapiens

```

```

<400> 429
ctttgctgga cggaataaaa gtggacgcaa gcatgacctc ctgatgaggy cgctgcattt 60
attgaagagc ggctgcagcc ctgcggttca gattaaaatc cgagaattgt atagacgcgg 120
atatccacga actcttgaag gactttctga tttatccaca atcaaatcat cggttttcag 180
tttggatggt ggctcatcac ctgtagaacc tgacttggcc ttggctggaa tccactcgtt 240
gccttccact tcagttacac ctcaactacc atcctctcct gttggttctg ttgctgtcca 300
agatactaag cccacatttg agatgcagca gccatctccc ccaatttcct ctgtccatcc 360
tgatgtgcag ttaaaaaaat tgccctttta tgatgtcctt gatgtttcta tcaagcccac 420
gagtttagtt caaagcagta ttcagcgatt tcaagagaag ttttttatt ttgctttgac 480
acctcaacaa gtttagagaga tatgcatact cagggatttt ttgccagggt gtaggagaga 540
ttat 544

```

```

<210> 430

```

<211> 507
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(507)
 <223> n = A,T,C or G

<400> 430
 cttatcncaa tggggctccc aaacttggct gtgcagtga aactccgggg gaattttgaa 60
 gaacactgac acccatcttc cccccgaca ctctgattta attgggctgc agtgagaaca 120
 gagcatcaat ttaaaaagct gcccagaatg ttnlccctggg cagcgttggt atctttgccn 180
 ccttcgtgac tttatgcaat gcatcatgct atttcatacc taatgagggg gttccaggag 240
 attcaaccag gatgtttcta cncctgtggg ttatgacaaa gacaactgcc aaagaatntt 300
 caagaaggag gactgcaagt atatcgtggt ggagaagaag gacccaaaaa agacctgttc 360
 tgtcagttaa tggataatct aatgtgcttc tagtaggcac agggctccca ggccaggcct 420
 ctattctctc tggcctctaa tagtcaatga ttgtgtagcc atgcctatca gtaaaaagat 480
 ttttgagcaa aaaaaaaaaa aaaaaa
 507

<210> 431
 <211> 392
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(392)
 <223> n = A,T,C or G

<400> 431
 gaaaattcag aatggataaa aacaaatgaa gtacaaaata tttcagattt acatagcgat 60
 aaacaagaaa gcacttatca ggaggactta caaatggaag tacaactctan aaccatctc 120
 tatcatggct aaatgtgaga ttgacacagc tgtattattt gtacatttga aacacctaga 180
 aagagatggg aaacaaaatc ccaggagttt tgtgtgtgga gtcctggggt ttccaacaga 240
 catcattcca gcattctgag attaggngga ttggggatca ttctggagtt ggaatgttca 300
 acaaaaatga tgttgttagg taaaatgtac aactctgga tctatgcaga cattgaaggt 360
 gcaatgagtc tggcttttct tctgctgttt ct
 392

<210> 432
 <211> 387
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(387)
 <223> n = A,T,C or G

<400> 432
 ggtatcncat cataatcaaa tatagctgta gtacatgttt tcattggngt agattaccac 60
 aaatgcaagg caacatgtgt agatctcttg tcttattctt ttgtctataa tactgtattg 120
 ngtagtccaa gctctcggnn gtccagccac tgnaaacat gctcccttta gattaacctc 180
 gtggaenctn ttgttgnatt gtctgaactg tagngccctg tatatttgct ctgtctgnga 240
 attctgttgc ttctggggca ttctcttngn atgcagagga ccaccacaca gatgacagca 300
 atctgaattg ntccaatcac agctgcgatt aagacatact gaaatcgtac aggaccggga 360
 acaacgtata gaacactgga gtccttt
 387

<210> 433
<211> 281
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(281)
<223> n = A, T, C or G

<400> 433
ttcaactagc anagaanact gcttcagggn gtgtaaaatg aaaggcttcc acgcagttat 60
ctgattaaag aacactaaga gagggacaag gctagaagcc gcaggatgtc tacactatag 120
caggcnctat ttgggttggc tggaggagct gtggaaaaca tggagagatt ggcgctggag 180
atcgccgtgg ctattccctn ttgntattac accagnagg ntctctgnt gcccaactggt 240
tnnaaaaccc ntatacaata atgatagaat aggacacaca t 281

<210> 434
<211> 484
<212> DNA
<213> Homo sapiens

<400> 434
ttttaaaata agcattttagt gctcagtcoc tactgagtag tctttctctc cccctctctg 60
aatttaattc ttccaacttg caatttgcaa ggattacaca ttccactgtg atgtatatgt 120
tgttgcaaaa aaaaaaaagt gtctttgttt aaaattactt ggtttgtaa tccatcttgc 180
tttttcccca ttggaactag tcatttaacc atctctgaac tggtagaaaa acatctgaag 240
agctagtcta tcagcatctg acaggtgaat tggatggttc tcagaacocat ttaccaccaga 300
cagcctgttt ctatcctgtt taataaatta gtttgggttc tctcatatga taacaaaccc 360
tgctccaatc tgtcacataa aagctctgta ctggaagttt agtcagcacc cccacaaacc 420
tttatttttc tatgtgtttt ttgcaacata tgagtgtttt gaaaataaag tacccatgtc 480
ttta 484

<210> 435
<211> 424
<212> DNA
<213> Homo sapiens

<400> 435
ggcccgctca gaggcaggtca ctttctgcoct tccacgtcct ccttcaagga agcccccagt 60
gggtagcttt caatatcgca ggttcttact cctctgcoct tataagctca aaccaccaa 120
cgatcgggca agtaaaacccc ctccctcgcc gacttcggaa ctggcgagag ttacgagcag 180
atgggctctg gggggggggg caagatagat gaggggggag ggcattgtgc ggggtgaccc 240
cttggagaga ggaataaggc cacaagaggg gctgccaccg ccactaacgg agatggccct 300
ggtagagacc ttggggggtc tggaaacctc ggactcccca tgctetaact cccacactct 360
gcatcagaa acttaaacct gaggtatttc tctgttttct actcgcaata aattcagagc 420
aaac 424

<210> 436
<211> 667
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(667)
<223> n = A, T, C or G

<400> 436
 accttgggaa nactctocaca atataaaaggg tctgtagactt tactccaaat tccaaaaagg 60
 tctctggccat gtaatctctga aagttttccc aaggtagcta taaaatcctt ataaggggtgc 120
 agcctctctt ggaattctctc tgattttcaaa gtctcactct caagtctctg aaaacgagggtg 180
 cagttctctga aaggcaggta tagcaactga tcttcagaaa gaggaactgt gtgcaccgggtg 240
 atggggctgac agagtaggat aggtattccag atgctgcacac ctctctggggg aaacagggtct 300
 gccaggtttt tcatagcact catcaaaagtc cgtgtcaagt ctgtgcttcg aatactaaacc 360
 tgttcatgtt tataggactc attcaagaat tttctatctc tctttcttat atactctcca 420
 agttcataat gctgctccat gccagctgg gtgagttggc caaatctctg tggcoactgag 480
 gattccttta tggggctcagt gggaaaggtg tcaatgggac ttcggtctcc atgccgaaac 540
 acccaagctca caaacttcaa ctctctggct agtacacttc ggtctagcca gaaaaaaagc 600
 agaaacaaga agccaaggct aaggtctgct gccctgccag gaggagggtg gcagctctca 660
 tgttgag 667

<210> 437
 <211> 693
 <212> DNA
 <213> Homo sapiens

<400> 437
 ctacgtctca accctcattt ttaggtaagg aatcttaagt ccaaagatat taagtactc 60
 acacagccag gtaaggaaag ctggattggc acactaggac tctaccatac cgggttttgt 120
 taaagctcag gttaggaggc tgataagctt ggaaggaaact tcacagagct ttttcagatc 180
 ataaaagata attcttagcc catgtttcttc tccagagcag acctgaaatg acagcacagc 240
 aggtactcct ctattttcac cctcttctgt tctactctct gccagtcaga cctgtgggag 300
 gccatgggag aaagcagctc tctggatgtt tgtacagatc atggactatt ctctgtggac 360
 catttctcca ggttacccta ggtgtcacta ttggggggac agccagcatc tttagctttc 420
 atttgagttt ctgtctgtct tcaagtagagg aaacttttgc tcttcacact tcaactctga 480
 acacctaact gctgttgcct ctgaggtggt ctgaggtggt gaaagacaga tatagagctt acagatttta 540
 tctatttctc aggcactgag ggctgtgggg tacctgtgtg tgccaaaaca gatcctgttt 600
 taaggacatg ttgcttcaga gatgtctgta actatctggg ggtctctgtt gctctttacc 660
 ctgcatcatg tgtctctctg gctgaaaatg acc 693

<210> 438
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 438
 ctgcttatca caatgaatgt tctcctgggc agcgttgtga tctttgccac ctctgtgact 60
 ttatgcaatg catcatgcta ttctcatcct aatgagggag ttccaggaga ttcaaccagg 120
 atgtttctac acctgtgggt tatgacaaag acaactgcc aagaatcttc aagaaggaggt 180
 actgcaagta tatctgttgg agaagaagga cccaaaaaag acctgttctg tcaagtgaatg 240
 gataactcaa tgtcttcta gtaggcacag ggctccagg ccaggcctca tctcctctgt 300
 gcccttaata gtcaataatt ggttagccat gcctatcagt aaaaagattt ttgagcaaac 360

<210> 439
 <211> 431
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1) ... (431)
 <223> n = A,T,C or G

<400> 439
 gttcctnnnta actcctgccca gaaacagctc tcttcaacat gagagctgca cccctcctcc 60

```

tgccacgggc agcaagcctt agccttggtc tctgtttct gcttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccatctga cacctttccc actgacccca taaaggaatc ctcattggcca caaggatttg 240
gccaaactcac ccactgtggc atggagcagc attatgaact tggagagtat ataagaaga 300
gatatagaaa attcttgaaat gagtccata aacatgaaca ggtttatatt cgaagcacag 360
acgttgaccg gactttgatg agtgctatga caaacctggc agcccgctga cgcggccgcg 420
aatttagtag t
431

```

<210> 440
 <211> 523
 <212> DNA
 <213> Homo sapiens

```

<400> 440
agagataaag cttaggtcaa agttcataga gttccatga actatatgac tggccacaca 60
ggatcttttg tatttaaggga ttctgagatt ttgcttgagc aggattagat aaggctgttc 120
tttaaatgtc tgaataggaa cagatttcaa aaaaaaaccc cacactctag ggtgggaaca 180
aggaaggaaa gatgtgaata ggcgtgaggg caaaaaacac atttaccat cagttccagc 240
ctctctctcaa ggagaggcaa agaaggaga tacagtggag acatctggaa agtttctccc 300
actggaaaaa tgctactatc tgtttttata ttctgttaa aatatatgag gctacagaac 360
taaaaattaa aacctctttg tgtcccttgg tcttggaaca tttatgttcc ttttaagaa 420
acaaaaatca aaccttacag aaagatttga tgtatgtaac acatatagca gctcttgaag 480
tatatatatc atagcaaata agtcatctga tgagaacaag cta
523

```

<210> 441
 <211> 430
 <212> DNA
 <213> Homo sapiens

```

<400> 441
gttctctcta actcctgcca gaaacagctc tcttcaacat gagagctgca cccctctccc 60
tgccacgggc agcaagcctt agccttggtc tctgtttct gcttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccatctga cacctttccc actgacccca taaaggaatc ctcattggcca caaggatttg 240
gccaaactcac ccactgtggc atggagcagc attatgaact tggagagtat ataagaaga 300
gatatagaaa attcttgaaat gagtccata aacatgaaca ggtttatatt cgaagcacag 360
acgttgaccg gactttgatg agtgctatga caaacctggc agcccgctga cgcggccgcg 420
aatttagtag
430

```

<210> 442
 <211> 362
 <212> DNA
 <213> Homo sapiens

```

<400> 442
ctaaggaaat agtagtgttc ccatcacttg tttggagtgt gctattctaa aagattttga 60
tttctgtgaa tgacaattat attttaactt tgggtgggga aagagttata ggaccacagt 120
cttcaactct gatacttgta aattaactct ttattgcact tgttttgacc attaagctat 180
atgtttagaa atggtcattt tacggaaaaa ttagaaaaat tctgataata gtgcagaata 240
aatgaattaa tgttttactt aatttatatt gaactgtcaa tgacaaataa aaattctttt 300
tgattatatt ttgttttcat ttaccagaat aaaaactaag aattaaaagt ttgattacag 360
tc
362

```

<210> 443
 <211> 624
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(624)
 <223> n = A,T,C or G

<400> 443
 tttttttttt gcaacacaa atacatcaca gtgaaatgtg taatccttgc aaattgcaag 60
 ttgaaagaat taaattcaga ggaggggaga gaaagagtac tcagtaggga ctgagcacta 120
 aatgcttatt ttaaaagaaa tgtaaagagc agaaagcaat tcaggctacc ctgcttttg 180
 tgcgtgctag tactcgcgtc ggtgtcagca gcacgtggca ttgaacattg caatgtggag 240
 cccaaaccac agaaaatggg gtgaaattgg ccaactttct attaacttgg ctctcgtttt 300
 tataaaatat tgtgaataat atcacctact tcaaagggca gttatgaggc ttaaatgaac 360
 taacgcctac aaacacacta aacatagata acataggtgc aagtactatg tatctggtac 420
 atgtgaataa tccttattat taaagtcaac gctaaaatga atgtgtgtgc atatgcta 480
 agtacagaga gagggcactt aaaccaacta agggcctgga gggaggtttt cctggaaa 540
 ngatgcttgt gctgggtcca aatcttggtc tactatgacc ttggccaaat tatttaaac 600
 ttgtccctat ctgctaataa gate 624

<210> 444
 <211> 425
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(425)
 <223> n = A,T,C or G

<400> 444
 gcacatcatt nntcttgcat tctttgagaa taagaagatc agtaaatagt tcagaagtgg 60
 gaagctttgt ccaggcctgt gtgtgaaccc aatgttttgc ttgaaatag aacaagtaag 120
 ttcatgtcta tagcataaca caaaatttgc ataagtgggt gtcagcaaat ccttgaatgc 180
 tgcctaatgt gagagggttg taaatcctt tbtgcaacac tctaactccc tgaatgtttt 240
 gctgtgctgg gacctgtgca tgcagacaa ggccaagctg gctgaaagag caaccagcca 300
 cctctgcaat ctgccacctc ctgctggcag gatitgtttt tgcacctgtg gaagagccaa 360
 ggaggcacca gggcataagt gagtagactt atggtcgacg cgcccgcgaa tttagtagta 420
 gtaga 425

<210> 445
 <211> 414
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(414)
 <223> n = A,T,C or G

<400> 445
 catgtttatg nttttggatt actttgggca cctagtgttt ctaaatcgct tatcattctt 60
 ttctgttttt caaaagcaga gatggccaga gtctcaacaa actgtatctt caagtctttg 120
 tgaaattctt tgcattgtgc agattattgg atgtagtctt cttaactag catataaatc 180
 tgggtgtttt cagataaatg aacagcaaaa tgtggtggaa ttaccatttt gaacatttgt 240
 aatgaaaaat tgtgtctcta gattatgtaa caataacta ttctctaacc attgattctt 300
 ggaattttat aatcctactc acaaatgact aggtctctcc tctgttattt tgaagcagtg 360
 tgggtgctgg attgataaaa aaaaaaaagc tcgacgcggc cgogaattta gtag 414

<210> 446

<211> 631
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(631)
 <223> n = A,T,C or G

```
<400> 446
acaaattaga anaaagtgcc agagaacacc acataccttg tccggaacat tacaatggct 60
ctctgcatgca tgggaagtgt gagcattcta tcaatatgca ggagccatct tgcagggtgtg 120
atgctgggta tactggacaa cactgtgaaa aaaaggacta cagtgttcta tacgtttgttc 180
ccggtccctgt acgatttcag tatgtcttaa tccgagctgt gattggaaca attcagattg 240
ctgtcatctg tgtgggtggtc ctctgcatca caagggccaa actttaggtg atagcattgg 300
actgagattt gtaaaccttc caaccttcca ggaaatgcc cagaagcaac agaattcaca 360
gacagaagca aaatacaggg cactacagtt cagacaatac aacaagagcg tccacagggt 420
taactctaaag ggaatgctgt tcacagtggtc tggactaccg agagcttgga ctacacaata 480
cagtattata gacaaaagaa taagacaaga gatctacaca tgttgccctg cattttgtgt 540
aatctacacc aatgaaacaa tgtactacag ctatatattga ttatgtatgg atatatattga 600
aatagtatac attgtcttga tgtttttttc g 631
```

<210> 447
 <211> 585
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(585)
 <223> n = A,T,C or G

```
<400> 447
ccttgggaaa antntcaca tataaagggt cgtagacttt actccaaatt ccaaaaaagt 60
cctggccctgt taatcctgaa agttttccca aggtagctat aaaatcctta taagggtgca 120
gcctctctgt gaattcctct gatttcaaa tctcactctc aagttcttga aaacgagggc 180
agttcctgaa aggcaggtat agcaactgat ctccagaag aggaactgtg tgcaccggga 240
tgggctgcca gagtaggata ggattccaga tctgacacc ttctggggga aacagggtgtg 300
ccaggtttct catgacactc atcaaaagtc ggtcaacgtc tgtgcttoga atataaacct 360
gttcattgtt ataggactca ttcaagaatt ttctatatct cttctctata tactctccaa 420
gttcataagt ctgctccatg cccagctggg tgagttggcc aaatccttgt ggccatgagg 480
attcctttat ggggtcagtg ggaaggtgt caatgggact tccgtctcca tgccgaacaa 540
ccaaagtcac aaacttcaac tccttggcta gtacactctg gtcta 585
```

<210> 448
 <211> 93
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(93)
 <223> n = A,T,C or G

```
<400> 448
tgctcgtggg tcattctgan nncgaaactg acentgccaag ccttgccgan gggccnccat 60
ggctccctag tgccctggag agganggggc tag 93
```

<210> 449
 <211> 706
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(706)
 <223> n = A,T,C or G

<400> 449
 ccaagttcat gctntgtgct ggacgtgga cagggggcaa aagcnnttgc tcgtgggtca 60
 ttctganeac cgaactgacc atgccagccc tgccgatggt cctccatggc tccctagtgc 120
 cctggagagg aggtgtctag tcagagagta gtccctggaag gtggcctctg ngaggagcca 180
 cggggacagc atcctgcaga tggctgggag cgtcccatc gccattcagg ctgcgcaact 240
 gttgggaagg gcgatcggtg cgggcctctt cgtattacg ccagctggcg aaagggggaat 300
 gtgctgcaag gcgattaagt tgggtaacgc cagggttttc ccagtcncca cgttgtaaaa 360
 cgacggccag tgaattgaat ttagggtgac ctatagaaga gctatgacgt cgcatgcacg 420
 cgtacgttag cttggatcct ctagagcgcc gcctactac tactaaatc gccggccgct 480
 cgacgtggga tcncaactga gagagtgga agtgacatgt gctggacnct gtccatgaag 540
 cactgagcag aagctggagg cacaacgcnc cagacactca cagctactca ggaggctgag 600
 aacaggttga acctgggagg tggaggttgc aatgagctga gatcaggccn ctgcncccca 660
 gcatggatga cagagtgaat ctccatctta aaaaaaaaa aaaaaa 706

<210> 450
 <211> 493
 <212> DNA
 <213> Homo sapiens

<400> 450
 gagacggagt gtcactctgt tgcccaggct ggagtgagc aagacactgt ctaagaaaaa 60
 acagttttaa aaggtaaaaa aacataaaaa gaaatatcct atagtggaaa taagagagtc 120
 aaatgaggct gagaacttta caaaggagatc ttacagacat gtgcgaata tcactgcatg 180
 agcctaagta taagaacaac ctttggggag aaacctcatc ttgacagtga ggtacaattc 240
 caagtccagt agtgaatagg gtggaattaa actcaaatc atcctgccag ctgaaacgca 300
 agagacactg tcagagagtt aaaaagttag ttctatccat gaggtgattc cacagtcttc 360
 tcaagtcaac acatctgtga actcacagac caagtctcta aaccactgtt caaactctgc 420
 tacacatcag aatcacctgg agagctttac aaactcccat tgccgagggt cgacgcggcc 480
 gcgaatttag tag 493

<210> 451
 <211> 501
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(501)
 <223> n = A,T,C or G

<400> 451
 ggccgctgcc cattcgccat tcaggctcgc caactgttgg gaagggcgat cgggtcgggc 60
 ctctctgcta ttacgccagc tggcgaaagg gggatgtgct gcaaggcgat taagtgtggg 120
 aacgccaggg ttttccagc cncgacgttg taaaacgagc gccagtgaat tgaatttagg 180
 tgcacnctata gaagagctat gacgtgcgat gcacgcgat gtaagcttgg atcctctaga 240
 gcggccgctc actactacta aattcgccgc cgcgtcgagc tgggatacnc actgagagag 300
 tggagagtga catgtgctgg acnctgtcca tgaagcactg agcagaagct ggaggacaaa 360
 cgcncacagc actcacagct actcaggagg ctgagaacag gttgaacctg ggaggtggag 420

gttgcataga gctgagatca ggccnctgcn ccccgagcatg gatgacagag tgaaactcca 480
tcttaaaaaa aaaaaaaaaa a 501

<210> 452
<211> 51
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(51)
<223> n = A,T,C or G

<400> 452
agacggttcc accnttaca cnccttttag gatgggnntt ggggagcaag c 51

<210> 453
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(317)
<223> n = A,T,C or G

<400> 453
tacatcttgc tttttcccca ttggaactag tcattaaccc atctctgaac tggtagaaaa 60
acatctgaag agctagtcta tcagcatctg gcaagtgaat tggatggttc tcagaacct 120
ttaccacana cagcctgttt ctatcctgtt taataaatta gtttgggttc tctacatgca 180
taacaaaccc tgcctcaatc tgtcacataa aagctctgtga cttgaagttt antcagcacc 240
cccacaaac tttatttttc tatgtgtttt ttgcaacata tgagtgtttt gaaaataaag 300
taccatgtc tttatta 317

<210> 454
<211> 231
<212> DNA
<213> Homo sapiens

<400> 454
ttcgaggtac aatcaactct cagagtgtag tttccttcta tagatgagtc agcattaata 60
taagccacgc cagctctttg aaggagcttt gaattctcct ctgctcactc agtagaacca 120
agaagaccaa attctttctg atccagctt gcaaacaaaa ttgttcttct aggtctccac 180
cttctctttt tcagtggtcc aaagctcctc acaatttcac gaacaacagc t 231

<210> 455
<211> 231
<212> DNA
<213> Homo sapiens

<400> 455
taccaaagag ggcataataa tcagctctac agtaggggtc accatcctcc aagtgaaaaa 60
cattgttccg aatgggcttt ccacaggcta cacacacaaa acaggaaaca tgccaagttt 120
gtttcaacgc attgatgact tctccaagga tcttctcttg gcacgaacca cattcagggy 180
caaagaattt ctcatagcac agtcacaaat acagggtctc tttctcctct a 231

<210> 456
<211> 231

<212> DNA

<213> Homo sapiens

<400> 456

ttggcaggta	cccttacaaa	gaagacacca	taccttatgc	gttattaggt	ggaataatca	60
ttccattcag	tattatcggt	attattcttg	gagaaaccc	gtctgtttac	tgtaaccttt	120
tgcactcaaa	ttcctttatc	aggaataact	acatagccac	tattttacaa	gccattggaa	180
ccctttttatt	tggtgcagct	gctagtcagt	ccctgactga	cattgccaag	t	231

<210> 457

<211> 231

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(231)

<223> n = A, T, C or G

<400> 457

cgaggatacc	agggtctcga	aaatctctnn	tttantagtc	gatagcaaaa	ttgttcacat	60
gcattccctta	atatgatctt	gctataatta	gattttcttc	cattagagtt	catcacagttt	120
tatttgattt	tattagcaat	ctctttcaga	agacccttga	gatcattaag	ctttgtatcc	180
agttgtctaa	atcgatgctt	catttcctct	gaggtgtgoc	tggtctttgt	g	231

<210> 458

<211> 231

<212> DNA

<213> Homo sapiens

<400> 458

aggtctgggt	ccccccactt	ccaactccct	ctactctctc	taggactggg	ctgggcccaag	60
agaagagggg	tggttaggga	agccgttgag	acctgaagcc	ccaccctcta	cttctcttca	120
acaccctaac	cttgggtaac	agcatttgga	attatcattt	gggatgagta	gaattttccaa	180
ggtctctgggt	taggcatttt	ggggggccag	accgccaggag	aagaagattc	t	231

<210> 459

<211> 231

<212> DNA

<213> Homo sapiens

<400> 459

ggtaccgagg	ctgcgtgaca	cagagaaacc	ccaacgcgag	gaaaggaatg	gccagccaca	60
cttcgcgaaa	acctgtgggt	gcccaccagt	cctaacggga	caggacagag	agacagagca	120
gccctgcact	gttttccctc	caccacagcc	atcctgtccc	tcattggctc	tgtgtcttcc	180
actatacaca	gtcacogtcc	caatgagaaa	caagaaggag	caccctccac	a	231

<210> 460

<211> 231

<212> DNA

<213> Homo sapiens

<400> 460

gcaggtataa	catgctgcaa	caacagatgt	gactaggaac	ggccgggtgac	atgggggaggg	60
ctatcacacc	tattcttggg	ggctgcttct	tcacagtgat	catgaagcct	agcagcaaat	120
cccacctccc	cacaagcaca	oggccagcct	ggagcccaca	gaagggtcct	ctgtcagcca	180
gtggagcttg	gtccagcctc	cagtcacacc	ctaccaggct	taaggataga	a	231

<210> 461
 <211> 231
 <212> DNA
 <213> Homo sapiens

<400> 461
 cgagggtttga gaagctctaa tgtgcagggg agccgagaag caggcgccct agggaggggtc 60
 gcgtgtgtctc cagaagagtg tgtgcatgcc agaggggaaa caggcgccctg tgtgtcctgg 120
 gtgggggttca gtgaggagtg ggaatttggt tcagcagaac caagcggttg ggtgaataag 180
 aggggggattc catggcactg atagagccct atagtttcag agctgggaat t 231

<210> 462
 <211> 231
 <212> DNA
 <213> Homo sapiens

<400> 462
 aggtaccctc attgtagcca tgggaaaatt gatgttcagt ggggatcagt gaattaaatg 60
 ggggtcatgca agtataaaaa ttaaaaaaaa aagacttcac gcccaatctc atatgatgtg 120
 gaagaactgt tagagagacc aacagggttag tgggttagag atttcagag tcttacattt 180
 tctagaggag gtatttaatt tcttctcact catccagtgt tgtatttagg a 231

<210> 463
 <211> 231
 <212> DNA
 <213> Homo sapiens

<400> 463
 taactccagcc tgggtgacaga gcgagaccct atcacccgcc cccacccccc caaaaaaaaa 60
 actgagtaca caggtgtcct ctgggcatgg taagtcttaa gtccctccc agatctgtga 120
 catttgacag gtgtcttttc ctctggacct cgggtgtccc atctgagtga gaaaaggcag 180
 tggggagggtg gatcttcacg tcgaagcggt atagaagccc gtgtgaaaag c 231

<210> 464
 <211> 231
 <212> DNA
 <213> Homo sapiens

<400> 464
 gtactcctaag attttatcta agttgccttt tctgggtggg aaagttaaac cttagtgtact 60
 aaggacatca catatgaaga atgtttaagt tggagggtgc aactgtaatt gcaaacaggg 120
 cctgtctcag tgactgtgtg cctgtagtcc cagctactcg ggagtctgtg tgaggccagg 180
 ggtgccagcg caccagctag atgctctgta acttctagcg ccatttttc c 231

<210> 465
 <211> 231
 <212> DNA
 <213> Homo sapiens

<400> 465
 catgttgttg tagctgtggt aatgctggct gcactctcaga cagggttaac ttacgtcct 60
 gtggcaaat agcaacaat tctgacatca tatttatggt ttctgtatct ttgttgatga 120
 aggatggcac aatttttgct tgtgttcata atatactcag attagtccag ctccatcaga 180
 taaactggag acatgcagga cattagggta gtgtgttagc tctggtaatg a 231

<210> 466
 <211> 231
 <212> DNA

<213> Homo sapiens

<400> 466

```

caggtaacctg   ttccattg   atactgtgct   agcaagcatg   ctctccgggg   ttttttaaat   60
ggccttcgaa   cagaacttgc   cacataacca   ggtataatag   ttctaacat   ttgccaggga   120
ctgtgccaat   caaatattgt   ggagaattcc   ctagtggagg   aagtcacaaa   gactataggc   180
aataatggag   accagtccca   caagatgaca   accagtcggt   gtgtgcggct   g               231

```

<210> 467

<211> 311

<212> DNA

<213> Homo sapiens

<400> 467

```

gtacaccctg   gcacagtgca   atctgaaact   gttcggcaact   catctttcat   gagatggatg   60
tgggtgcttt   tctccttttt   catcaagact   cctcagcagg   gagcccagac   cagcctgcac   120
tgtcgcctaa   cagaaggctct   tgagattcta   agtgggaatc   atttcagtga   ctgtcatgtg   180
gcatgggtct   ctgcccaagc   tcgtaatgag   actatagcaa   ggcgcgtctg   ggcagctcag   240
tgtgacctgc   tgggctctcc   aatagactaa   caggcagtg   cagttggacc   caagagaaga   300
ctgcagcaga   c               311

```

<210> 468

<211> 3112

<212> DNA

<213> Homo sapiens

<400> 468

```

cattgtgttg   ggagaaaaac   agaggggaga   tttgtgtggc   tgcagccgag   ggagaccagg   60
aagatctgca   tgggtgggaag   gacctgatga   tacagagttt   gataggagac   aattaaaggc   120
tggaaaggca   tggatgcctg   atgatgaagt   ggactttcaa   actggggcac   tactgaaacg   180
atgggatggc   cagagacaca   ggagatgagt   tggagcaagc   tcaataacaa   agtggttcaa   240
cgaggacttg   gaattgcatg   gagctggagc   tgaagttag   cccaattggt   tactagttag   300
gtgaatgtgg   atgattggat   gatcatttct   catctctgag   cctcaggttc   cccatccata   360
aaatgggata   cacagtatga   tctataaagt   gggatatagt   atgatctact   tcaactgggt   420
atttgaagga   tgaattgaga   taattttatt   caggtgccta   gaacaatgcc   cagattagta   480
catttggtgg   caactgagaaa   tggcataaca   ccaaatttaa   tatatgtcag   atgttactat   540
gattatcatt   caactcmeta   gttttgtcat   ggcccaatt   atcctcactt   gtgcctcaac   600
aaattggact   gttaacaaag   gaattctctg   tcttggttaa   tggctgagca   ccaactgagca   660
tttccattcc   agttggcttc   ttgggtttgc   tagctgcata   actagtcata   ttaataaata   720
gaagtgttaa   cattctccca   gtgatttttt   tatctcacct   ttgaagatac   tatgttatgt   780
gattaaataa   agaacttgag   aagaacaggt   ttcattaaac   ataaatacaa   tgtagacgca   840
aattttctgg   atgggcaata   cttatgttca   caggaaatgc   tttaaaaat   gcagaagata   900
attaaatggc   aattggacaaa   gtgaaaaact   tagacttttt   ttttttttt   ggaagtattc   960
ggatgttctc   tatgcactta   aaggagaact   aagaaatagc   agtgagttcc   acataaatcca   1020
acctgtgaga   ttaaggctct   ttgtgggaaa   ggacaaagat   ctgtaaat   acagtttctc   1080
tccaaagcca   acgtcgat   ttgaacata   tcaagctct   tctccaagc   atataactca   1140
tagtcacatt   tctctatggg   atgcacttat   gaaaaatggt   ggctgtcaac   atctagtcaac   1200
tttagctctc   aaaaatgggt   attttaagag   aaagttag   aatctcat   ttattctcgt   1260
ggaaggacag   cattgtggct   tggactttat   aaggtcttta   ttaactaaa   tagtgagaaa   1320
ataagaaagg   ctgtgactt   taccatctga   ggcacacata   ctgctgaat   ggaagataatt   1380
aacatcacta   gaacacagcaa   gatgacaata   taatgtctaa   gtatgtacat   gtttttgcac   1440
atttccagcc   ccttttaata   tccacacaca   caggaaagc   aaaagggaagc   acagagatcc   1500
ctgggagaaa   tgcocggccg   ccatcttggg   tcatcgatga   gctctgcct   gtgcctggtc   1560
ccgttgtgga   gggaaggaca   ttgaaaaatg   aattgatgtg   ttccttaaa   gatggggcag   1620
aaaacagatc   ctgttgtgga   tatttatttg   aaaggagta   cagatttgaa   atgaagtgcac   1680
aaagtggagca   ttaccaatga   gaggaaaaca   gacgagaaa   tcttgatggc   ttccaaagac   1740
atgcaacaaa   caaaatggaa   tactgtgatg   acatggagca   gccaaagctg   ggagagata   1800
accacggggc   agaggtcag   gattctggcc   ctgctgccta   aactgtgctg   tcaataccaa   1860

```

```

atcatttcat atttctaacc ctcaaaacaa agctgttgta atatctgac tctacgggtc 1920
cttctgggco caacattctc catatatoca gccacactca tttttaatat ttagtctcca 1980
gatctgtact gtgacgtcttc tacactgtgag aataacatta cttactttgt tcgaagaccc 2040
ttcgtgtgtc tgcttaatat gtactgtgact gtttttcta aggagtggtc tggccaggag 2100
gatctgtgaa caggctggga agcatctcaa gatctttcca ggggtatact tactagcaga 2160
cagcatgato attacggagt gaattatcta atcaacatca tctcagtggt ctttgcccat 2220
actgaaatcc atttccact tttgtgccca ttctcaagac ctcaaaatgt tactccatta 2280
atatcacagg attaactttt ttttttaacc tggagaatct caatgttaca tgcagctatg 2340
ggaaattaat tacatatttt gttttccagt gcaaaagatga ctaagtcttt tatccctccc 2400
ctttgtttga tttttttccc agtataaagt taaaatgctt agccttgtac ttagggctga 2460
tacagccaca gctctccccc atccctccag ccttatctgt catcaccatc acccctccc 2520
atgcaactaa acaaaatcta acttgtaatt ccttgaacat gtcaggcata cattattctc 2580
ctcgtcctgag acagtcttcc ttgtctctta aatctagaat gatgtaaaagt ttgtaataag 2640
ttgactatct tactctatgc aaagaaggga cacatatgag attcatcatc acatgagaca 2700
gcaaaacta aaagtgtaat ttgattataa gagtttagat aaatatatga aatgcaagag 2760
ccacagaggg aatgtttatg gggcacgttt gtaagcctggt gatgtgaagc aaagccaggg 2820
aacctcctga tatcttatat aataactctc atttctctat ctctatcaca atctccaca 2880
agcttttcat agaattcatg cagtgcacat ccccaaaggt aacctttatc catttcatgg 2940
tgagtgcgtc ttagaatttt ggcaaatcat actggtcact tatctcaact tttagatgtg 3000
tttgtctctg ttgtaatttg ggcactcttg tgagccactt taggggttacc 3060
tcttgccaat aaagaattta caaagagcaa aaaaaaanaa aaaaaaaaaa aa 3112

```

<210> 469

<211> 2229

<212> DNA

<213> Homo sapiens

<400> 469

```

agctcttttt aaattcttta ttgccaggag tgaaccctaa agtggctcac aagagtgccc 60
tatttctttc aattactcac aaggacaaac acatctcaaa gttgagataa gtgaccagta 120
tgatttgcca aaattctaaa gcgcactcac catgaaatgg ataaaggtta cctttgggga 180
tttgcactgc atgaattctg tgaaggctt gttggtatct gtgatagaga tagagaaagt 240
aagtatacta tataagatac tatgaggttc cctgcctttg cttcacatcc caggcttaca 300
aacgtgcccc ataaacattc cctctgtggc tcttgcaatt catatattta tctaaactct 360
tataatcaaa tacactttta gtatttgctg tctcatgtga tgatgaatct catatgtgtc 420
ccttcttttg atgaagtaag atagtcaact tatcaaaac tttaacatcat tctagatttta 480
agagacaagg agagagctct caggcagaag gaataatgta tgccctgacat tctgcaaggaa 540
ttacaagtga gatgtttgtt aggtgcatgg gaggggttga tgggtgatgc agataaagct 600
ggagggatgg ggagaggctg tggcgtata cagcctcagt acaaggctaa gcattttaac 660
tttatactgg aaaaaaaatc aacaaagggg gagggataaa ggaacttagtc atctttgcac 720
tgaaaaacaa aatatgtaat taaattccca tagctgcatg taacattgaa tctctccagg 780
ttaaaaaaaa agttaatctct gtgatattaa tggaaatgaca ttttgaggtc ttgagaattg 840
gcacaaaagt gggaaatgaa ttccagtatg ggcaagacac ctgagatga tggttattag 900
ataattcact ccgtaatgat catgctgtgt gctagtaagt ataaccctgg aaagatcttg 960
agatgcttcc cagcctgttc acagatcccc tgggccagaa cactccttag gaaaacagct 1020
cagctacata ttaggcagca acacgaaggg tctttgaaca aatgagtaaa ttgtattcta 1080
cagtgtagaa aggtcacagt acagatctgg gaactaataa ttaaaaatga gtgtggctg 1140
atatattggag aatgtttggc ccagaaggaa ccgtagagat cagatatcac acacgctttg 1200
ttttgagggt tagaataatg aaatgatttg gttatgaacg cacagtttag gacagcagggc 1260
cagaaactcg accctctgcc ccgtggttat ctctcccca gcttggctgc ctcagtgtac 1320
cacagctatc cattttgttt gttgcatgtc ttgtgaagcc atcaagattt tctctgtctg 1380
tttctctcta ttggtaatgc tcaacttttg acttcatttc aaatcttga tccctgttca 1440
ataaatactc acacagggat ctgttttctc gccatcctt taaggaaacac atcaattcat 1500
ttctaatgt ccttccctca caagcgggac caggcacagg gcgagctca tctgtgacct 1560
aagatggcgg ccgggcattt ctcccaggga tctctgtgct tctttttgtg cttcctgtgt 1620
gtgtgatat ttaaaagggc tggaaatgtg caaaaacatg tcaactacta gacattatat 1680
tgtcatcttg ctgtttctag ttgatttaat tatctccatt tcagcagatg ttgctctca 1740
gatgtgaaag tcaagcagct tcttatttct tcactgtgaa atacatacga ccatttgagg 1800

```

```

agacaaatgg caaggtgtca gcataccctg aacttgagtt gagagctaca cacaatatta 1860
ttggtttccg agcatcacaa acaccctctc tgtttcttca ctgggcacag aattttaata 1920
cttattttcag tgggctgttg gcaggaaacaa atgaagcaat ctacataaag tcactagtgc 1980
agtgcctgac acacacacatt ctcttgaggt cccctctaga gatccacag gtcataatgac 2040
ttcttgggga gcagtggtgctc acacctgtaa tcccgacact ttggggaggt ttggcaggtg 2100
gggtcacctga ggtcagaggt tcaagaccag cctggccaat atggtgaaac cccatctcta 2160
ctaaaaatac aaaaattagc tgggcgtgct ggtgcattgc tgtaatccca gccccaacac 2220
aatggaatt

```

<210> 470

<211> 2426

<212> DNA

<213> Homo sapiens

<400> 470

```

gtaaattctt tattgccagg agtgaacct aagtggctc acaagagtgc cctatttctt 60
tcaattaaact acaaggacaa acacatctca aagttagat aagtgaccag tatgattttg 120
caaaattctta aagcgacatc accatgaaat ggataaagg ttactttggg tacttgcaat 180
gcataaatc ttgtgaaagc ttgttgagta ttgtgataga gatagagaaa tgaagtatat 240
tatataagat actatgaggt tccctgcctt tgcttcaact cccaggctta caaacgtgcc 300
ccataaacat tccctctgtg gctcttgcat ttcatatatt tatctaaact ctataatca 360
aattacactt ttgattttg ctgtctcatg tgatgatgaa tctcatatgt gctccctctt 420
tgcatgaagt aagatagatca acttattcaa aactttacat cattctagat ttaagagaca 480
aggaagagct tctcaggcag aaggaataat gtatgcctga catgttcaaag gaattacaa 540
ttagattttt tttagggtgca tgggaggggt tgatggtgat gacagataag gctggaggga 600
tggggagagg ctgtggctgt atacagcctc agtacaaggc taagcatttt aactttatac 660
tggaaaaaaa atcaaacaaa ggggagggat aaaggactta gtcattcttg cactggaaaa 720
caaaaatagt aattaaattc ccatagctgc atgtaacatt gaattcttcc aggttaaaaa 780
aaaaagttaa tctgtgata ttaatggaaat gacattttga ggtcttgaga atggggacaa 840
aagtgggaaa tgaatttcag tatgggcata gacactgagg atgatgttga tttagataatt 900
cactcgttaa tgatcatgct gtgtgctagt aagtataacc ctggaaagat ctgagatgc 960
ttcccgacct gttcacagat cccctggggc agaacactcc ttaggaaaaa cagttagcta 1020
catattaggg agcaaacaga agggctcttg aacaaaaatga gtaatggtat tctacagtgt 1080
ggaaaggtca cagtacagat ctgggaacta aatattaaaa atgagtgtgg ctggatatat 1140
ggagatggt ttggccagaa ggaaccgtag agatcagata ttacaacagc tttgttttga 1200
gggttagaaa tatgaaatga tttggttatg aacgcacagt ttaggcagca gggccagaat 1260
cctgaccttc tggccctgtg ttaactctct cccagcttgg ctgctctcag tcatcagat 1320
attccatttt gtttcttgca tgtcttgta agccatacag attttctcgt ctgttttctc 1380
ctcattgtta atgtcactt ttgtacttca ttcaaaact gtaatccgt tcaaaataat 1440
atccacacaa ggaatctgtt tctgcccact cctttaagga acacatcaat tcaatttcta 1500
atgtctctcc ctcaacagcg ggaccaggca caggggcagg ctcatcgat acccaagatg 1560
goggccgggc atttctccca gggatctctg tgtctctctt tgtgcttctc atattgtcat 1620
atattttaaag gggctgaaaa ttgtgcaaaa catgtcacta cttagacatt atattgtcat 1680
cttgctgttt gctatgatgt taattatctc caattcagca gatgtgtggc ctgagatggc 1740
aaagtgcagca gcccttctta ttctcacctt ggaaatacat acgacaaatt gaggagacaa 1800
atggcaaggt gtcagcatic cctgaacttg agttgagagc tacacacaaat attatttatt 1860
tccgagcatc acaaacccc tctctgtttc ttcactgggc acagaatttt aactactatt 1920
tcagtgggct ttggcagga acaaatgaag caactctacat aaagtcaata gtcagatgac 1980
tgacacacac cattctcttg aggtcccttc tagagatccc acaggtcata tgaactcttg 2040
gggagcagtg cgtcacacct gtaatccag cactttggga ggctgaggca ggtgggtcag 2100
ctgaggtcag gagtccaaga ccagcctggc caatctggtg aaaccccatc tctactaaaa 2160
atacaaaaa tagctggggc tgcgtggtga tgcctgtaat cccagctact tgggaggtgc 2220
aggcaggaga attgctggaa catggggagg ggaggttgca gtgagctga atgtgcat 2280
tgactcgaa cctgggcgag agagtggaa tctgtttcca aaaaacaaac aaacaaaaaa 2340
ggcatagtca gatacaacgt ggtgggagtg tgtaaataga agcaggatat aaaggcatg 2400
gggtgacggt ttggcccaac acaatg

```

<210> 471

<211> 812
 <212> DNA
 <213> Homo sapiens

<400> 471
 gaacaaaatg agtaatgtta ttctacagt tagaaaggtc acagtacaga tctgggaact 60
 aaattattaaa aatgagtgtg gctggatata tggagaatgt tgggcccaga aggaacogta 120
 gagatcagat attacaacag ctttgttttg agggtagaa atatgaaatg atttggttat 180
 gaacgcacag ttaggcagc agggccagaa tcttgacct ctgcccctg gttatctct 240
 cccagcttg gctgctcat gtcacacag tattccattt tgtttgttg atgtctctgt 300
 aagccatcaa gattttctcg tctgttttcc tctcattggt aatgctcact tttgtacttc 360
 atttcaaatc tgtaatccc ttcaataaaa tatccacaac aggatctgtt ttctgccc 420
 tcccttaagg aacaatcaa ttcatcttct aatgtccttc cctcaacaag gggaccaggc 480
 acagggcgag gctcatcgat gaccacaagt ggccgcccgg catttctccc agggatctct 540
 gtgcttctt ttgtgcttcc tgtgtgtgtg gatattttaa ggggctggaa atgtgcaaaa 600
 acatgtcact acttagacat tatattgtca tcttgcgtgt tctagtgtg ttaattatct 660
 ccatttcagc agatgtgtgg cctcagatgg taaagtcagc agccttctct atttctcacc 720
 tctgtatcat caggtccttc ccaccatgca gatcttctg gtctccctcg gctgcagcca 780
 cacaaatctc cctctgtttt tctgatgcc ag 812

<210> 472
 <211> 515
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(515)
 <223> n = A,T,C or G

<400> 472
 acggagactt attttctgat attgtctgca tatgtatgtt ttaaagatc tggaaatagt 60
 cttatgactt tctatcatg cttattaata aataatacag cccagagaag atgaaaatgg 120
 gtccagaat tatttgtctc tgcagccogg tgaatctcag caagaggaac caccaactga 180
 caatcaggat attgaacctg gacaagagag agaaggaaca cctccgatcg aagaactgt 240
 agtagaaggt gattgccagg aaatggatct ggaagagact cggagtgagc gtggagatgt 300
 ctctgatgtc aaagagaaga ctccacctaa tctaaagcat gctaaagcat aagaagcagg 360
 agatggggcg ccaataagtt aaaagaagc aagctgaagc tacacacatg gctgatgtca 420
 cattgaaat gtgactgaaa atttgaaat tctctcaata aagtttgagt ttctctgtaa 480
 gaaaaaaaaa naaaaaaaaa aanaaaaaaa aaaaa 515

<210> 473
 <211> 5829
 <212> DNA
 <213> Homo sapiens

<400> 473
 cgcagccgg ggaagcccaa gctggctcga agaccacca gccacctgtg caaggggtgg 60
 cctggaccag ttggaccagc caccaagctc acctactcaa ggaagcagg atggccaggt 120
 tgcacaagcc tgagtggctg ccacctgata gctgatggag cagagggcctg aggaataatca 180
 gatggacat ttatgctctt aatggatctt aagttaattt ttctataaag cacatggcac 240
 cagtcacatg ctcagagctc gtagggcact gggaccaca gcagggccag ttcccaggat 300
 tgccatccag gggggccttc tgtagccctg gccagacctg gccaggggtg cttgggtgctc 360
 tttagccgag ctcggcctcc ttggcatgca caggcccacg gtactgacac ctgctctga 420
 gtgagctgtg cctgccttgg ctgccaccta actgctgatg gaggcagggc cttaggaaaa 480
 gcaaatggcg ctgtagccca acttttaggtt agaagaagt gtaccatgtg oggcccgtag 540
 ttggtgactg gtgcacttgc cctctgcaga ggtgggtggg tgcctcttgg 600
 ccagcttggc cttgcctggc atgcacaagc ctcagtgcac caactgtcct acaaatggag 660

acacagagag gaaacaagca ggggggtcag gagcagggtg tgtgctgcct ttgggggtcc 720
 agtccatgcc togggtcgta tggtaactgca ggctctctgg ttgccaagag gcggaccaca 780
 ggctctcttg aggaggaact taactgtcaag tgccaagaag agccaaaatt accatccatg 840
 agactaaagc tctctgtggcc ctggcgagac ttaaaaattg tgccaaggca ggaacaagctc 900
 actcggaaga gcgtgtcagt agctggggcc tatgcatgcc ggccagggcc gggtcggtgt 960
 aaggagcaac gacccaacct tgcagggtg cgctagtgc agggcgagca tccaccaact 1020
 caccgcgtcg aggaagtggg gatggccagg ttccacagc ctgagtgctc tccaccttat 1080
 tgctgatgga gcagaggcct taagaaaaagc agatggcact gtggccctac ctttaggggtg 1140
 gaagaaatga tgcatactgc cggacgctaa ttggtgactg gtacaccggc ctctgctaca 1200
 cctttgcaga ggtggctggt tgcctcttga gccagcttgt ccttgcccggt catgcacaag 1260
 tttcagtcca acaactttgc cacaaatgga gccatataga ggaacaaga gcaggtttca 1320
 ggagaagggg tgcacctgcc tttggggctc cagtccatgc ctacaggtgt acatggcact 1380
 cggggctctc ttgttgcag gagcggaacc acaggccatc ttggggagga ctttgggttc 1440
 aagtgcagaa agcagccagg attgccatcc agggggacct tctatagccc tggccaaacc 1500
 ttgcaggggt gctgtgttgc tctttgagcc ggctggcctc cctggcatg cacgggcccc 1560
 aggtgtgtgc agctgtctc gagtgtgctt gtccgtcctt ggctgccacc tctggggggt 1620
 tgctgtctga ggggtgtgac cggccaccac ccttaccagc tcaaggaaat ggatggccat 1680
 gttcccaag cctgagtggt tggccacctga ttgctgatgg agcaaaaggcc ttagggaaag 1740
 cagatggccc ttggccctac ctttttgtta gaagaactga tgttccatgt cctgcagca 1800
 gtgaggttgg ttgctgtgcc ccacagctctc ggcgccctc gcagaggtgt cctgttgtct 1860
 ctttggggcc tatgtggcctt gccacgcatg cacaagcctc agtgcacta cttgtgctca 1920
 aatggggcca tctgggggaa acgagcagcc atctcaggag caaggtgtat gctgcctttg 1980
 ggggtctccag tctgtcctc aagggtctta tgtcactgtg ggctctcttg ttgccaagag 2040
 gcagacataa ggccgtcttg agagggactt tatgttcaag tgcagaaagc agcaggattt 2100
 gccaccctcg ggaactctgcc ttctgtggcc ctggccaaac ttagaatttg gccgtagaca 2160
 ggacagagct acttggaagta gcgtgtccgt agctgggttc tgtgcatgcc ggcgaagggc 2220
 gggtcggtcc ggggagcaac cagccacctc tgcgggggtg cgctggagc aggtggagca 2280
 gccacagctc caccactcc aggaagccgg ggtagccagg ttcccaagc agtgggggt 2340
 gccacctaat ggctgaagaa acagaggcct tgggaaaaac agatggcaat tggccctac 2400
 ctttatgcta gaagagctga tttagctga ctggcagcgt ttgggggttg ttgctggctc 2460
 gectgtgtgt ggccgatccg tgcaggatg gctgtgtgcc ctttgagcca gcttgccctt 2520
 gcccgccatg gccagcctc agtgcaacaa ctgtgtgcca aatggggcca tatagaggaa 2580
 agggagcagct ggctctggag catgggtgtc actcccttg ggccctcagt ccactgtctc 2640
 tgggtcgatg gacactcggt gcttgttgtt tgcgaagagg cagaccacag gtcacttga 2700
 ggaggacttt atgttccagt ccagaaagca gccagtggta ccaccaggg gaacttgtct 2760
 tctgtgccca ggccagacgt agaatttgac aaagtcaagg cgtctcagt cagagcgccg 2820
 tctcggtcc cggggctctg gcatgccggg cagggcgggg ctggcttggg gcgcaagcag 2880
 ccaactctgt taagggtgtg cctggagcag gtggagcagc caccacactc acgcatgaa 2940
 aagaagcagg atggccagggt tccaacatcc tgagtggctg ccaactgtgt gctgatggag 3000
 cagagagcctg aggaagaagca gatggcactg cttttagtct ctgttctttg tctctcttga 3060
 tctttttcag ttaattgtctg ttttatcaga gactaggatt gcaaacctct cctttttg 3120
 ctttccattt gcttggttaa tttctctcca tccctttatt ttaagccatc gtgtgtcttt 3180
 gcaatgaga tgggtctcct gaatacagga caacaattgg ttttactct ttaaccaact 3240
 tgccagctgt tgtcttttaa ctggggcatt tagccattt acatttaagt ttagattgt 3300
 tacatgtgaa atttatctg tcatgatgtt gctagcttt ttttttccc atagtgttg 3360
 agttctctta tagtgtcaat ggtctttaca attcgatgt tttttgtag ggctggact 3420
 ggtttttctt tctacgttt agtgtctcct tcaggagctc ttgtaacaca agaatttga 3480
 tttatttctt gtaaggtaaa tatgtggatt tattcttgg gactgtatc tttgcoctt 3540
 accccaagaa tctattctt ttaaaatgca attcaaatg gcataaaaca tttacagct 3600
 atggaagcg ttgtggcatt agaactctta tttataggat ttttttgtt tttttgaga 3660
 tatgtcttt tctactgagg cagaagtgcc gtggtttgat cataattcac cacagccctg 3720
 aactcttgag gccacggcat ccttttgctc taactctcca accagtttga ttttttgct 3780
 taaggcatca tgcgtggcta atttttcaac gtttttttt tttttttgtc gagattatgg 3840
 tgtcactgtg ttgctctggt tgcactcaaa tttttgacct caagggatct tctgccacg 3900
 gctctcaaaa gtgctaggat tatatgcagt atacacactg cctattgtag agttatacat 3960
 tattttcaaa gctttattgt aaagaccatt tattgcctt ggccataata actcaatata 4020
 atatctctga aactttttt tgacaaattt tggggcgtag tgatgagaga aggggggtt 4080
 aacttttcta atagaggtta acttagagcc atttaagaaa ggaaaaaaca caaattatca 4140


```

gaaaaacaac agtaagatca agtgcaaaag ttctgtggca aagatgatga gagtaaagaa 4200
tatagttttg tgaactcatgg tggcttttac tttgtttctg aatttctgag tacgggttaa 4260
catttaaaga atctacatta tagataacat ttatttgcag ctaacttctat tatcaagcta 4320
gttattgggtt ttgtatgaga ttatttctcag cctacttctat tatcaagcta 4380
ttaattgagt tcgatgatct tacagcaaaag ctgaaagctg tatcttcaaa atattgtctat 4440
ttgactaaaa agttatttcaa caggagttat tatctataaa aaaaatacaa caggatata 4500
aaaaacttga ggataaaaaa atgtttggaaa aagtaatatatt aaatcttaaa aacacatattg 4560
aaactacaca algggtgaaga cacattgggt aagtaaaaaa atataaattg gatctagaag 4620
aaaggccaat gcaggcaata gaaaaattag tagaaatccc tttaaagggt agttgtgtaa 4680
atcaggtaag ttatttataa atttgccttc attatttca ctgcaaaatta tattttggat 4740
atgtatatat atgtgtcttc ctctgcctgt cttacagcaa tttgccttgc agagtcttag 4800
gaaaaagggt gcattgtgtt ttactttcaa aatatttaaa tttccatcat tatacaaaa 4860
tcaatttttc agagttaatga ttctcaactgt ggaactcatt gattattaag accgttggc 4920
ataagattac atcctctgac tataaaaato ctggaagaaa acctaggaaa tattcgtctg 4980
gacattgcac ttggcaatga atttatgggt caacctgat ccacttcag tcactcca 5040
tgatttttta ttccagata catgaaatca tatgagtga aactttctt tgattgagca 5100
ttttggaaa cgtctttttg tagaatctgc aagtggaatatt ttggaacctt taggcgcta 5160
tgctgaaaaa agaaatatct tcactacatg atgaccacca cgacgagctg gggaaaccag 5220
cacctgtgg aattcactac ggtgcataga atacatctc ccttcagtc gcttgggta 5280
acttaggtca tgggccacct ggctgatagc agtttccaca gaaatgctc aagatgaag 5340
tgagtggcc ggccaacctc caccactgcc ctgtaagacc atgggacaca gaggccaaca 5400
gttcttttca ttgtgctatc cctgtttaga tgggagaaaa tacactgcc tcattttgg 5460
acctctgtg tgaacattcc acggcagact gtcgctaatt gtggatgaag aattgaatga 5520
atgaatgaat atgagaaaa atgaataaat ttctcagatc ctggctgga agctgtgta 5580
tgaggatggt gggttagagga gggctctgtt ttctgcctt taagtacata atgtcactt 5640
tgggcgagga gcacaggctt tgaatgcaga ccgactggac tttaattctg gtttactag 5700
ttgtattgt gtgacctgtt gaaagttaac taaacctct gtgcctgtt ctttatctg 5760
aaaatggaga taataagatg tcaaaaggact gtgtaagaa ttaaatgctt taaaaaaa 5820
aaaaaaa 5829

```

<210> 474

<211> 1594

<212> DNA

<213> Homo sapiens

<400> 474

```

atttatggat cattaatgcc tctttagtag tttagagaaa acgtcaaaag aaatggcccc 60
agaataagct tctttagattg taaaattcta tgtcattggc tcaaatattgt atagtatctc 120
aaaatatata tattatagaca tctcagataa tatatttgaa atagcaaaatt cctgttagaa 180
aataatagta ctttaactaga tgagaataac aggtcgccat tatttgaatt gtctctcatt 240
cgttttttca ttgttgtgtt actcatgttt tacttatgag ggatatatatt aacttccact 300
tttttcagaa ttattgtatg cagtcatgat gagaatgcaa ttttaagttc cttgattgott 360
tttcaactt ctattactag aaataagaat acagtaaat ttggcaagaaa attgaccag 420
ttcaataaaa ttttttagta aatctgattg aaaaataaca ttgcttatgg ctttcttaca 480
tcaattttgt tatgtctcag acacactatc tgaaattaag gcttcaaaat tctaattag 540
tgcaaatgtg taaaatatca atactttatg ttcaagctgg ggocctctca ggtgctcgtg 600
gctgagagag aaagatgcta gctccgcaag ccggagagag aacacogcca catgtttaca 660
cggacacacc gcacagctgga cacatgacca gactcacatg tacagacaga cattgaccatt 720
accacatgga gaacccgtca cacagtcaca cggacacact ggcatagta catggaacga 780
cacacagaca ttgggagaaa tcaactggac acacacacac actatcacag gtagcaacag 840
acacggagac atcaccacat ggacacactg tcacactacc acagggacac gagacatcac 900
actgtcacat ggacacacca tcacacacat gaacacacg acacactgc atatggacac 960
tggcacacac actgccacac tgtcacatgg acacacctcc acaccatcac accaccaac 1020
acactgctcg tggacacaag gacacacaga cactgtcaca cagatacaca aaacactgtc 1080
acacggagac atcaccatgc agatacacca ccactctggt gcogtctgga ttaacctgt 1140
ggggggacag cgtggcataa ctcatgccta agtgaactgc ttccaccoca ggtgtgattg 1200
ccctccatca acactgccca ccccggttg gggctacccc agcccatctt taaaaacag 1260
ggcaagggtg actaatggag tgggtggag agttggaaga aatccagacg tcagtcaacg 1320

```

ggatagaatt	ccaaggaac	cctctttttg	gaggatgggt	tccattttctg	gaggcgatct	1380
ggcgagaggg	tgaatgcctt	cttgcttgct	tcttggggaa	tcagagagag	tcggttttgg	1440
gggtgggaaga	gtgtggctgt	gtactttgaa	ctctctgtaa	ttctctgact	catgtccaca	1500
aaaccaacag	ttttgtgaat	gtgtctggag	gcaaggggaag	ggccactcag	gatctatgtt	1560
gaagggaaga	ggcctggggc	tggagtattc	gctt			1594

<210> 475
 <211> 2414
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (33)
 <223> n=A, T, C or G

<400> 475

cccaacacaa	tggctttata	agaatgcttc	acntgtgaaa	aacaatatc	aaagtcttct	60
tgtagattat	ttttaaggac	aaatctttat	tcctgtttta	atttatttag	ctttccctgt	120
agctaattat	tcagtctgaa	cacattttta	atgctgtaaa	tgtagataag	gtaattttatg	180
tatcattaat	gcctcttttag	tagtttagag	aaaacgtcaa	aagaaatggc	cccagaataa	240
gcttcttgat	gttctaaatt	ctatgtcatt	ggctcaaat	tgtatagtat	ctcaaaatat	300
aaatatatag	acatctcaga	taatatattt	gaaatagcaa	attcctgtta	gaaaataata	360
gtacttaact	agatgagaat	aacaggtcgc	cattatttga	attgtctcct	attcgttttt	420
catttgttgt	gttactcatg	ttttacttat	ggggggatat	atataacttc	cgctgttttc	480
agaagtattg	tatgcagtca	gtatgagaat	gcaatttaag	tttccctgat	gctttttcac	540
acttctatta	ctagaaataa	gaatacagta	atattggcaa	agaaaattga	ccagttccaat	600
aaaatttttt	agttaaatctg	attgaaaata	aacattgctt	atggctttct	tacatcaata	660
ttgttatgtc	ctagacacct	tatctgaaat	tacggcttca	aaattctaat	tatgtgcaaa	720
tgtgtaaaa	atcaactctt	tatgttcaag	ctggggcctc	ttcaggcgctc	ctgggctgag	780
agagaaaagt	gctagctccg	caagccgggg	agggaacacc	gccacattgt	tacatggaca	840
caccgccacg	tggacacatg	accagactca	catgtacaga	cacacggaga	cattaccaca	900
tggagacacc	gtcacacagt	cacacgagca	cactggcata	gtcacatgga	cggacacaca	960
gacatatgga	gaaatcacac	tgacacacca	ccacactatc	acagggacac	agacacacgg	1020
agacatcacc	acatggacac	actgtcacac	taccacaggg	acacgagaca	tcaactgttc	1080
acatggacac	accatcacac	acatgaacac	accgacacac	tgccatatgg	acactgcccac	1140
acacactgcc	acactgtcac	atggacacac	ctccatacca	tcacaccacc	acacacactgt	1200
ccatgtggac	acaagggacac	acagacacgt	tcacacagat	acacaaaaca	ctgtcacacg	1260
gagacatcac	catgcagata	caccaccaca	tggacatagc	accagacact	ctgcccacaca	1320
gataccaccac	cacacagaaa	tggcgacaca	ctgcccacaca	gacacccaca	catcgtttgc	1380
acactttcat	gtgtcagctg	gcgggtgtgg	cccacagact	ctgggctcta	atcgagaaat	1440
tacttggaca	tatagtgaag	gcaaaatttt	tttttatttt	ctgggtaacc	aagcgggact	1500
ctgtctcaaa	aaaaagaaaa	aaaagcaata	tactgtgtaa	tcgttgacag	cataattcac	1560
tattatgtag	atcggagagc	agaggattct	gaatgcattat	acatatcatt	aacatttcaa	1620
tacattactc	ataattactg	atgaactaaa	gagaaaccaa	gaaattatgt	tgatagttaa	1680
attgacctgt	agaattgtag	acacaaaaga	accgtaaagt	gagaaatgtg	gaaattcatg	1740
ctataaggcg	atgcaagaat	aaaaattagg	gagaaaacag	gagagttttt	caagagcttt	1800
ctgtgtcagt	aagtccaactt	gtatcggttta	atttttaaaa	ggtttattta	catgcaattaa	1860
actgcacata	cttcaattgt	acatttttgt	aattcttggc	attttagtgt	ctataaaacc	1920
agcaacatat	taaaatagca	aacatatcca	ttacottttac	cacaaaagtt	ttctgtgtgt	1980
ttttctactc	actttttcct	gcctatcccc	ccatctcttc	cacaggtaac	caactgatcca	2040
cttccagtgt	ctatccatga	gttttttatt	ccaaatacat	gaaatcatat	gaatttctgg	2100
tttttctgtg	tggagcccaa	ggagcaaggg	cagaatgagg	aacatgatgt	ttcttccwca	2160
cagttactca	tgaactctcc	atccaggact	gaggggggca	ttcctctcca	tttaggactg	2220
ggggcatcct	ttctccatcca	gtattggggg	tcactcttct	ccatccagta	tggggggcca	2280
ttctctctcca	tccaggacct	gaggggtgtc	cttttctcgg	cttcccttga	tggcagctct	2340
ttcctctcatg	tttatagtta	cttaccatata	aatacactgtg	ccgttttttc	ctaaaaataa	2400
aaaaaaaaaa	aaaa					2414

<210> 476
 <211> 3434
 <212> DNA
 <213> Homo sapiens

<400> 476
 ctgtgctgca aatggggcca tatagaggaa agggagcagct ggctctggag catgggtgtgc 60
 actccctttg ggcccttcagt coactgtctca tgggtcgat gacactgcgg gcttgttggg 120
 tgccaagagg gacagccacag gtcatcttga ggaggacttt atgttccagt ccagaaagca 180
 gccagtgta ccacccagg gacttgtgct tctgtggccc aggccagacg tagaatttga 240
 caaagtccag acgtgtctcag tcagagcagc atgtgggtcc ccggggccctg tgcatgccgg 300
 gcagggccag gctggcttaa ggagcaagca gccacctctg ttagggggtgt gctctggagca 360
 ggtggagcag ccaaccaacct cagcactga aagaagcagg gatggccagg ttcccaacac 420
 ctgagtggct gccacctgat ggctgatgga gcagaggcct gaggaaaagc agatggcact 480
 gctttgtagt gctgttcttt gtctctcttg atctttttca gttaatgtct gttttatcag 540
 agactaggat tgcacaacct gctctttttt gctttccatt tgcctggtaa ataatctccc 600
 atccctttat ttaaagccta tgtgtgtctt tgcacatgag atgggtctcc tgaatacagg 660
 acaacaatgg gtcttttact tttatccaac ttgccagtct gtgtctttta actggggcat 720
 ttaggccatt tcatctttaag tttagtattt gttacatgtg aaatttatcc tgtcatgatg 780
 ttgtagcttt tttatttttc coattagttt gcagtttctt tatagtgtca atggtcttta 840
 caattctgata tgttttttga ttggctggta ctggtttttc ctttctacgt ttagtgtctc 900
 ctccagagcg tctgttaaca caagaatgtg gatttatttc ttgtaaggta aatatgtgga 960
 tttattctgg gactgtattc tatggccttt accccaagaa tcaactacct tttaaatgca 1020
 attcaaatga gcaataaaca tttacagcct atggaagcg ttgtggcatt agaactctta 1080
 tttataggat tatttttgtt ttttttgaga tatggtcttt gtcatcgagg cagaagtgcc 1140
 gtggttttag cataattcac cacagccctg aactcttgag tccaaagcat ccttttgctt 1200
 taattctcca accagttgga tctacaagca taaggcatca tgcgtggcta attttttcac 1260
 gttttttttt tttttgtcga gatttatgta tcactgtgtt gctctggctg atctcaaatg 1320
 tttgaacctc agggatcttt ctgccacagc ctctaaagt gctaggatta tatgcatgat 1380
 acacatgcc tatgttagag tattacatta ttttcaagt cttattgtaa gagccattta 1440
 ttgcttttgg cctaaataac tcaataatat atctctgaaa cttttttttg acaaattttg 1500
 gggcggtgat atgagagaag ggggtttgaa accttctaat aagagttaac tttaggcat 1560
 taagaagagg aaaaaacaca aattatcaga aaacaacag taagatcaag tgcanaagtt 1620
 ctgtggcaaa gatgatgaga gtaagaata tatgtttgtg actcatggtg gcttttacct 1680
 gtgtcttgaa tttcttgata cgggttaaca tttaaagaat ctacattata gatacaattt 1740
 tattgcaggt aaatgtattt caaaaatttgt tattgttttt gtatgagatt attctcagcc 1800
 tacttcatca tcaagctata ttattttatt aatgtagttc gatgatctta cagcaagcgt 1860
 gaaagctgta tcttcaaaat atgtctattt gactaaaag ttattcaaca ggaattatta 1920
 tctataaaaa actacaacag gaatataaaa aacttgagga taaaaagatg ttgaaaaaag 1980
 taattattaa tcttaaaaaa catatggaaa ctacacaatg gtgaagacac attgtgtgaag 2040
 taaaaaataa taaattggat ctagaagaaa gggcaatgca ggcaatagaa aaattagtat 2100
 aaatcccttt aaaggttagt ttgtaaaac aggttaagtt atttataatt tgcotttcat 2160
 tatttccactg caaattatat ttggatagtg tataatat ttgttctctc tgcctgtctt 2220
 acagcaattt gccctgcaga gtctaggaaa aaaggtggca tgtgttttta ctttcaaat 2280
 atttcaattt ccatcattat acaaaaatca attttcaga gtaattgatt cactgtgga 2340
 gtcatttgat tattaagacc cgttggcata agattacatc ctctgactat aaaaactcgt 2400
 gaagaaaacc taggaatat tgcctggagc atgtcacttg gcaatgaatt ttctggcgct 2460
 ttggaatcct gcagatataa taatgataat taaacaaaac actcagagaa actgccaacc 2520
 cttagtgtaa gttatttgtt actgtgcttt gggattaaaa taagttaacta cgtgttatag 2580
 aacttttata ctgatacaca gacactaaaa agggaaaggg tttagatgag aagctctgct 2640
 atgcaatcaa gactctcagc cactcatttc ttaggggctg gcaggagctc cctgtgag 2700
 gagggttagg agtctgtagc ttcaggtaag atacttataa ccttccagag ttcttccatt 2760
 ttttccataa gtttcccaa aaaggttatg acactttata agaattcttc actgtgtaa 2820
 acaaaatc aaagtctctc tgtagattat ttttaaggac aaattcttat tccatgttta 2880
 attttattag ctttccctgt agctaatatt tcaagctgaa cacattttaa atgctgttaa 2940
 tgtagataat gttattttat tatcattaat gctcttgtag tagtttagag aaaaagctca 3000
 aagaatggc ccagagataa gcttcttgat ttgtaaaatt ctatgtcatt ggctcaaat 3060

tgtatagtat	ctcaaaatat	aaatatatag	acatctcaga	taatatattt	gaaatagcaa	3120
atctctctct	gaaaaataata	gacttaact	agatggaact	aacaggctgc	cattatttta	3180
attgtctcct	attctgtttt	ctatttgttt	gtgtactcat	ttttactatt	ggggggatag	3240
atatacaact	cgctgttttc	agaagtatgt	ctatgcagta	gtatgagaat	gcaattttt	3300
ttctcttgt	cgctttttac	actctctata	catgaaaaaa	gaatacaga	atattggcaa	3360
agaaaaatga	caagttccaat	aaaaattttt	agtaaatctg	attgaaaata	aaaaaaaaaa	3420
aaaaaaataa	aaaa					3434

```
<210> 477
<211> 140
<212> PRT
<213> Homo sapiens
```

<400> 477
Met Asp Gly His Thr Asp Ile Trp Arg Asn His Met Asp Thr Pro Pro
 5 10 15

His Tyr His Arg Asp Thr Asp Thr Arg Arg His His His Met Asp Thr
20 25 30

Leu Ser His Tyr His Arg Asp Thr Arg His His Thr Val Thr Trp Thr
35 40 45

His His His Thr His Glu His Thr Asp Thr Leu Pro Tyr Gly His Trp
50 55 60

His Thr His Cys His Thr Val Thr Trp Thr His Leu His Thr Ile Thr
65 70 75 80

Pro Pro His Thr Leu Pro Val Asp Thr Arg Thr His Arg His Cys His
85 90 95

Thr Asp Thr Gln Asn Thr Val Thr Arg Arg His His His Ala Asp Thr
100 105 110

Pro Pro Leu Trp Cys Arg Leu Asn Tyr Pro Ala Gly Gly Thr Ala Val
115 120 125

Ala Tyr Ser Cys Leu Ser Asp Trp Leu Ser Pro Gln
130 135 140

```
<210> 478
<211> 143
<212> PRT
<213> Homo sapiens
```

<400> 478
Met Tyr Arg His Thr Glu Thr Leu Pro His Gly Asp Thr Val Thr Gln
5 10 15

Ser His Gly His Thr Gly Ile Val Thr Trp Thr Asp Thr Gln Thr Tyr
20 25 30

Gly Glu Ile Thr Trp Thr His His His Thr Ile Thr Gly Thr Gln Thr
35 40 45

His Gly Asp Ile Thr Thr Trp Thr His Cys His Thr Thr Thr Gly Thr

50	55	60
Arg Asp Ile Thr Leu Ser His Gly His Thr Ile Thr His Met Asn Thr		
65	70	75 80
Pro Thr His Cys His Met Asp Thr Gly Thr His Thr Ala Thr Leu Ser		
	85	90 95
His Gly His Thr Ser Thr Pro Ser His His His Thr His Cys Leu Trp		
	100	105 110
Thr Gln Gly His His Thr Asp Thr Val Thr Gln Ile His Lys Thr Leu Ser		
	115	120 125
His Gly Asp Ile Thr Met Gln Ile His His His Ser Gly Ala Val		
	130	135 140

<210> 479

<211> 222

<212> PRT

<213> Homo sapiens

<400> 479

Met Tyr Arg His Thr Glu Thr Leu Pro His Gly Asp Thr Val Thr Gln		
	5	10 15
Ser His Glu His Thr Gly Ile Val Thr Trp Thr Asp Thr Gln Thr Tyr		
	20	25 30
Gly Glu Ile Thr Leu Thr His His His Thr Ile Thr Gly Thr Gln Thr		
	35	40 45
His Gly Asp Ile Thr Thr Trp Thr His Cys His Thr Thr Gly Thr		
	50	55 60
Arg Asp Ile Thr Leu Ser His Gly His Thr Ile Thr His Met Asn Thr		
	65	70 75 80
Pro Thr His Cys His Met Asp Thr Ala Thr His Thr Ala Thr Leu Ser		
	85	90 95
His Gly His Thr Ser Ile Pro Ser His His His Thr His Cys His Val		
	100	105 110
Asp Thr Arg Thr His Arg His Cys His Thr Asp Thr Gln Asn Thr Val		
	115	120 125
Thr Arg Arg His His His Ala Asp Thr Pro Pro His Gly His Ser Thr		
	130	135 140
Arg His Ser Ala Thr Gln Ile His His His Thr Glu Met Arg Thr His		
	145	150 155 160
Cys His Thr Asp Thr Thr Ser Leu Pro His Phe His Val Ser Ala		
	165	170 175
Gly Gly Val Gly Pro Thr Thr Leu Gly Ser Asn Arg Glu Ile Thr Trp		

180 185 190
 Thr Tyr Ser Glu Gly Lys Ile Phe Phe Tyr Phe Leu Gly Asn Gln Ala
 195 200 205
 Arg Leu Cys Leu Lys Lys Arg Lys Lys Lys Gln Tyr Thr Val
 210 215 220

<210> 480
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 480
 Met Glu Pro Tyr Arg Gly Asn Glu Gln Pro Ser Gln Glu Gln Gly Val
 5 10 15
 Cys Cys Leu Trp Gly Leu Gln Ser Leu Pro Gln Gly Ser Tyr Val Thr
 20 25 30
 Val Gly Phe Leu Val Val Lys Arg Gln Thr Ile Gly Arg Leu Glu Arg
 35 40 45
 Asp Phe Met Phe Lys Cys Arg Lys Gln Pro Gly Leu Pro Pro Ser Gly
 50 55 60
 Leu Cys Leu Leu Trp Pro Trp Pro Asn Leu Glu Phe Gly Arg Arg Gln
 65 70 75 80
 Asp Arg Leu Thr Trp Ser Ser Val Ser Val Ala Gly Val Cys Ala Cys
 85 90 95
 Arg Ala Arg Pro Gly Trp Leu Gly Glu Gln Pro Ala Thr Ser Ala Gly
 100 105 110
 Val Arg Leu Glu Gln Val Glu Gln Pro Pro Ala His Pro Leu Gln Glu
 115 120 125
 Ala Gly Val Ala Arg Phe Pro Arg Pro Glu Trp Val Pro Pro Asn Gly
 130 135 140

<210> 481
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 481
 Met His Gly Pro Gln Val Leu Ala Arg Cys Ser Glu Cys Ala Cys Pro
 5 10 15
 Ala Leu Ala Ala Thr Ser Ala Gly Val Arg Leu Glu Gly Val Asp Arg
 20 25 30

Pro Pro Thr Leu Pro Ser Gln Gly Ser Gly Trp Pro Cys Ser His Ser
 35 40 45
 Leu Ser Gly Cys His Leu Met Ala Asp Gly Ala Lys Ala Leu Gly Lys
 50 55 60
 Ala Asp Gly Pro Trp Pro Tyr Leu Phe Val Arg Arg Thr Asp Val Pro
 65 70 75 80
 Cys Pro Ala Ala Ser Glu Val Gly Gly Cys Ala Pro Ser Ser Trp Arg
 85 90 95
 Ala Leu Ala Glu Val Thr Gly Cys Ser Leu Gly Pro Leu Gly Leu Ala
 100 105 110
 Gln His Ala Gln Ala Ser Val Leu Leu Leu Cys Tyr Lys Trp Ser His
 115 120 125
 Ile Gly Glu Thr Ser Ser His Leu Arg Ser Lys Val Tyr Ala Ala Phe
 130 135 140
 Gly Gly Ser Ser Pro Cys Leu Lys Gly Leu Met Ser Leu Trp Ala Ser
 145 150 155 160
 Trp Leu Ser Arg Gly Arg Pro
 165

<210> 482

<211> 143

<212> PRT

<213> Homo sapiens

<400> 482

Met Glu Pro Tyr Arg Gly Asn Lys Lys Gln Val Gln Glu Lys Gly Val
 5 10 15
 Pro Cys Leu Trp Gly Ser Ser Pro Cys Leu Arg Cys His Met Ala Leu
 20 25 30
 Arg Ala Ser Trp Leu Pro Gly Gly Gly Pro Gln Ala Ile Leu Gly Arg
 35 40 45
 Thr Leu Cys Ser Ser Ala Glu Ser Ser Gln Asp Cys His Pro Gly Gly
 50 55 60
 Pro Ser Ile Ala Leu Ala Lys Pro Cys Arg Gly Val Trp Leu Leu Phe
 65 70 75 80
 Glu Pro Ala Trp Pro Pro Trp His Ala Arg Ala Pro Gly Ala Gly Thr
 85 90 95
 Leu Leu Arg Val Cys Leu Ser Cys Leu Gly Cys His Leu Cys Gly Gly
 100 105 110
 Ala Ser Gly Gly Gly Gly Pro Ala Thr Asn Leu Thr Gln Ser Arg Lys
 115 120 125

169

Trp Met Ala Met Phe Pro Gln Pro Glu Trp Leu Pro Pro Asp Gly
 130 135 140

<210> 483
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 483
 Met Glu Thr Gln Arg Gly Asn Lys Gln Arg Ala Gln Glu Gln Gly Val
 5 10 15

Cys Cys Leu Trp Gly Ser Ser Pro Cys Leu Gly Ser Tyr Gly Thr Ala
 20 25 30

Gly Phe Leu Val Ala Lys Arg Arg Thr Thr Gly Leu Leu Glu Glu Asp
 35 40 45

Phe Thr Phe Lys Cys Arg Lys Gln Pro Lys Leu Pro Ser Met Arg Leu
 50 55 60

Ser Leu Leu Trp Pro Trp Arg Asp Leu Lys Phe Val Pro Arg Gln Asp
 65 70 75 80

Lys Leu Thr Arg Ser Ser Val Ser Val Ala Gly Ala Tyr Ala Cys Arg
 85 90 95

Ala Gly Pro Gly Trp Leu Lys Glu Gln Pro Ala Thr Ser Ala Arg Val
 100 105 110

Arg Leu Val Gln Ala Glu His Pro Pro His Pro Leu Glu Glu Val
 115 120 125

Gly Met Ala Arg Phe Pro Gln Pro Glu Cys Leu Pro Pro Tyr Cys
 130 135 140

<210> 484
 <211> 30
 <212> PRT
 <213> Homo Sapien

<400> 484
 Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
 1 5 10 15
 Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile
 20 25 30

<210> 485
 <211> 31
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 485
 gggaagctta tcacctatgt gccgcctctg c

170

<210> 486
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 486
 gcgaattctc acgtgagta tttaggcc

27

<210> 487
 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 487
 cccgaattct tagctgccca tccgaacgcc ttcatc

36

<210> 488
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 488
 gggaagcttc ttccccggct gcaccagctg tgc

33

<210> 489
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 489
 Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg Ala Val Tyr Leu Ala
 1 5 10 15
 Ser Val Ala

<210> 490
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 490
 Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala Thr Cys

171

```

Leu Ser His Ser      5      10      15
      20

<210> 491
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 491
Thr Cys Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu
1      5      10      15
Thr Gly Phe Thr
      20

<210> 492
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 492
Ala Leu Thr Gly Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr
1      5      10      15
Leu Ala Ser Leu
      20

<210> 493
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 493
Tyr Thr Leu Ala Ser Leu Tyr His Arg Glu Lys Gln Val Phe Leu Pro
1      5      10      15
Lys Tyr Arg Gly
      20

<210> 494
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 494
Leu Pro Lys Tyr Arg Gly Asp Thr Gly Gly Ala Ser Ser Glu Asp Ser
1      5      10      15
Leu Met Ile Ser

```

20

<210> 495
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 495
 Asp Ser Leu Met Thr Ser Phe Leu Pro Gly Pro Lys Pro Gly Ala Pro
 1 5 10 15
 Phe Pro Asn Gly
 20

<210> 496
 <211> 21
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 496
 Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
 1 5 10 15
 Pro Pro Pro Pro Ala
 20

<210> 497
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 497
 Leu Leu Pro Pro Pro Ala Leu Cys Gly Ala Ser Ala Cys Asp Val
 1 5 10 15
 Ser Val Arg Val
 20

<210> 498
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 498
 Asp Val Ser Val Arg Val Val Val Gly Glu Pro Thr Glu Ala Arg Val
 1 5 10 15
 Val Pro Gly Arg
 20

<210> 499
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 499
 Arg Val Val Pro Gly Arg Gly Ile Cys Leu Asp Leu Ala Ile Leu Asp
 1 5 10 15
 Ser Ala Phe Leu
 20

<210> 500
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 500
 Leu Asp Ser Ala Phe Leu Leu Ser Gln Val Ala Pro Ser Leu Phe Met
 1 5 10 15
 Gly Ser Ile Val
 20

<210> 501
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 501
 Phe Met Gly Ser Ile Val Gln Leu Ser Gln Ser Val Thr Ala Tyr Met
 1 5 10 15
 Val Ser Ala Ala
 20

<210> 502
 <211> 414
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(414)
 <223> n=A,T,C or G

<400> 502
 caccatggag acaggcctgc gctggccttt cctggctcgt gtgctcaaaag gtgtccaatg 60
 tcagtcggtg gaggagtcog ggggtcgccct ggtcacgcct gggacacott tgacantcac 120
 ctgtagagtt ttgtgaatng acctcagtag caatgcaatg agctgggtcc gccaggctcc 180
 agggaagggg ctggaatgga tcggagccat tgataattgt ccacantacg cgacctgggc 240

gaagagccga	tttnatnattt	ccaaaacctn	gaccacgggtg	gatttgaata	tgaccagtcc	300
gacaaccgag	gacacggcca	cctatttttg	tggcagaatg	aatactggta	atagtggttg	360
gaagaatatt	tggggcccg	gcacctggt	caccgtntcc	tcaggccaac	ctaa	414

<210> 503

<211> 379

<212> DNA

<213> Homo Sapien

<220>

<221> misc_feature

<222> (1)...(379)

<223> n=A,T,C or G

<400> 503

atnctggtgt	gcttggtcaa	aggtgtccag	tgctcagtcgg	tggaggagtc	cggggggtgc	60
ctggtcacgc	ctgggacacc	cctgacactc	acctgcacgc	tnctctggatt	ngacatcagt	120
agctatggag	tgagctgggt	ccgccaggct	ccagggaagg	ggctgggnata	catcggtatca	180
ttagttagtag	tggtacattt	tacgcgagct	gggcgaagg	ccgattcacc	atttccaaaa	240
cctngaccac	ggtggatttg	aaaatcacca	gtttgacaac	cgaggacacg	gccacctatt	300
tnctgtccag	aggggggttt	aattataaag	acatttgggg	cccaggcacc	ctggtccaccg	360
tnctccttagg	gcaacctaa					379

<210> 504

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 504

Gly	Phe	Thr	Asn	Tyr	Thr	Asp	Phe	Glu	Asp	Ser	Pro	Tyr	Phe	Lys	Glu
1			5					10						15	
Asn	Ser	Ala													

<210> 505

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 505

Lys	Glu	Asn	Ser	Ala	Phe	Pro	Pro	Phe	Cys	Cys	Asn	Asp	Asn	Val	Thr
1				5					10					15	
Asn	Thr	Ala	Asn												
			20												

<210> 506

<211> 407

<212> DNA

<213> Homo Sapien

<400> 506

```

atggagacag gctcgcgctg gcttctcctg gtcgctgcgc tcaaaggtgt ccagtgtcag      60
tcgctggagg agtcgggggg tcgctcggtc acgctcgga caccctgac actcacctgc      120
accgtctctg gattctcctc cagtagcaat gcaatgatct gggtcggcca ggctccaggg      180
aaggggctgg aatacatcgg atacattagt tatggtggta gcgcatacta cgcgagctgg      240
gtgaaaggcc gattcaccat ctccaaaacc tcgaccacgg tggatctgag aatgaccagt      300
ctgacaaccg aggcacggcg cacctatttc tgtgccagaa atagtattt tagtgggtatg      360
ttgtggggcc caggcacctc ggtcacccgc tcttcagggc aacctaa      407

```

```

<210> 507
<211> 422
<212> DNA
<213> Homo Sapien

```

```

<400> 507
atggagacag gctcgcgctg gcttctcctg gtcgctgcgc tcaaaggtgt ccagtgtcag      60
tcgctggagg agtcgggggg tcgctcggtc acgctcgga caccctgac actcacctgc      120
acagtctctg gattctcctc cagcaactac gacctgaact gggtcggcca ggctccaggg      180
aaggggctgg aatggatcgg gatcataat tatgttggtg gacgggacta cgcgaactgg      240
gcaaaaggcc gggtcaccat ctccaaaacc tcgaccacgg tggatctcaa gatcgccagt      300
cgcacaaccg aggcacggcg cacctatttc tgtgccagag ggtggaagtg cgtgagtgct      360
ggctcgtgct tgcgcattcg gggcccaggc accctggtea cgtctcctt agggcaacct      420
aa      422

```

```

<210> 508
<211> 411
<212> DNA
<213> Homo Sapien

```

```

<220>
<221> misc_feature
<222> (1)...(411)
<223> n=A, T, C or G

```

```

<400> 508
atggagacag gctcgctggtg cttctcctgg tcgctgtgct caaaggtgtc cagtgtcagt      60
cggtggaggg gtccgggggt cgctgggtca cgctgggac accctgaca ctacactgca      120
cagtctctgg aatcgacctc agtagctact gcatgagctg ggtccggcca ggtccaggga      180
aggggctgga atggatcgga atcattggta ctctcggtga cacatactac cgcaggtggg      240
cgaaaggccg attcacctc tccaaaacct cgaccacggt gcatntgaaa atnccagtc      300
cgacaaccga ggacacggcc acctatttct gtgccagaga tcttcgggat ggtagtagta      360
ctgggttatta taaatctgg ggcccaggca cctcggtcac cgtctccttg g      411

```

```

<210> 509
<211> 15
<212> PRT
<213> Artificial Sequence

```

```

<220>
<223> Made in a lab

```

```

<400> 509
Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
1           5           10           15

```

```

<210> 510
<211> 15
<212> PRT
<213> Artificial Sequence

```

<220>

<223> Made in a lab

<400> 510

Pro	Glu	Tyr	Asn	Arg	Pro	Leu	Leu	Ala	Asn	Asp	Leu	Met	Leu	Ile
1					5				10				15	

<210> 511

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 511

Tyr	His	Pro	Ser	Met	Phe	Cys	Ala	Gly	Gly	Gly	Gln	Asp	Gln	Lys
1				5				10					15	

<210> 512

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 512

Asp	Ser	Gly	Gly	Pro	Leu	Ile	Cys	Asn	Gly	Tyr	Leu	Gln	Gly	Leu
1				5				10					15	

<210> 513

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 513

Ala	Pro	Cys	Gly	Gln	Val	Gly	Val	Pro	Asx	Val	Tyr	Thr	Asn	Leu
1				5				10					15	

<210> 514

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 514

Leu	Cys	Lys	Phe	Thr	Glu	Trp	Ile	Glu	Lys	Thr	Val	Gln	Ala	Ser
1				5				10					15	

<210> 515

<211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 515
 Met Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg
 1 5 10 15

<210> 516
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 516
 Val Ser Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln
 1 5 10 15

<210> 517
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 517
 Glu Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met
 1 5 10 15

<210> 518
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 518
 Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg His Tyr Asp Glu Gly
 1 5 10 15

<210> 519
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 519
 Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg Asn Tyr Asp Glu Gly Cys
 1 5 10 15

Gly

<210> 520
 <211> 25
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 520
 Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr
 1 5 10 15
 Glu Ala Arg Arg His Tyr Asp Glu Gly
 20 25

<210> 521
 <211> 21
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 521
 Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
 1 5 10 15
 Pro Pro Pro Pro Ala
 20

<210> 522
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 522
 Leu Leu Val Val Pro Ala Ile Lys Lys Asp Tyr Gly Ser Gln Glu Asp
 1 5 10 15
 Phe Thr Gln Val
 20

<210> 523
 <211> 254
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<220>
 <221> VARIANT
 <222> (1)...(254)
 <223> Xaa = any amino acid

179

<400> 523

```

Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
 1      5      10      15
Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
 20      25      30
Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
 35      40      45
Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
 50      55      60
Trp Val Leu Ser Ala Thr His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
 65      70      75      80
Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
 85      90      95
Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
100      105      110
Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
115      120      125
Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
130      135      140
Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
145      150      155      160
Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
165      170      175
Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys
180      185      190
Ala Gly Gly Gly Gln Xaa Gln Xaa Asp Ser Cys Asn Gly Asp Ser Gly
195      200      205
Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
210      215      220
Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
225      230      235      240
Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
245      250

```

<210> 524

<211> 765

<212> DNA

<213> Homo sapien

<400> 524

```

atggccacag caggaaatcc ctggggctgg ttctctgggg accatcatct tgggtgtcga 60
ggatcgctcg tctctggtag ctgcagccaa atcataaacg gogaggagct cagcccgac 120
tgccagccct ggcaggcgcc actggtcatg gaaaacgaat tgttctgctc gggcgtcctg 180
gtgcatccgc agtgggtgct gtcagccgca cactgtttcc agaactccta caccatcggg 240
ctgggctctgc acagtcttga ggcgcaccaa gagccaggga gccagatggt gggaggccagc 300
ctctccgtac ggcacccaga gtacaacaga cccttgctcg ctaacgacct catgtctatc 360
aagttggacg aatccgtgtc cgagttctgac accatccgga gcatcagcat tgcttcgcag 420
tgccctaccg cggggaaactc ttgcctcgtt tctggctggg gctctctggc gaacggcaga 480
atgcctaccg tctgcagtg cgtgaacgtg tcggtggtgt ctgaggaggt ctgcagtaag 540
ctctatgacc cgtgtacca ccccgcatg ttctgcgccg gogaggggca agaccagaag 600
gactcctgca acggtgactc tggggggccc ctgatctgca acggtaact gcagggcctt 660
gtgtctttcg gaaaagcccc gtgtggccaa gttggcgtgc caggtgtcta caccaacctc 720
tgcaaatcca ctgagtgatg agagaaaacc gtccaggcca gtttaa 765

```

<210> 525

<211> 254

<212> PRT

<213> Homo sapien

180

<400> 525

Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
 1 5 10 15
 Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
 20 25 30
 Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
 35 40 45
 Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
 50 55 60
 Trp Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
 65 70 75 80
 Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
 85 90 95
 Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
 100 105 110
 Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
 115 120 125
 Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
 130 135 140
 Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
 145 150 155 160
 Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
 165 170 175
 Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys
 180 185 190
 Ala Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly
 195 200 205
 Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
 210 215 220
 Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
 225 230 235 240
 Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
 245 250

<210> 526

<211> 963

<212> DNA

<213> Homo sapiens

<400> 526

atgagttcct gcaacttcac acatgccacc ttgtgtctta ttggtatccc aggattagag 60
 aaagcccaatt ttgggttgg cttccccctc ctttccatgt atgtagtggc aatgtttgga 120
 aactgcacag ttgtcttcat cgtgaaggac gaacgcagcc tgcacgctcc gatgtacctc 180
 ttctctgcga tgccttgacg cattgacctg gccttatcca catccacat gccaaagatc 240
 cttgcctttt tctggtttga ttcccgagag attagctttg aggcctgtct taccagatg 300
 ttctttattc atgccctctc agccattgaa tccaccatcc tgcctggccat ggcctttgac 360
 cggtatgtgg ccatctgccca cccactggcg catgctgcag tgcctcaaaa tacagtaaca 420
 gccagatttg gcatcgtggc tgtggtccgc ggatccctct ttttttccc actgcctctg 480
 ctgatcaagc ggctggcctt ctgccactcc aatgtcctct cgcactccta ttgtgtccac 540
 caggatgtaa tgaagtgtgc ctatgcagac actttgccca atgtggata ttgtcttaact 600
 gccattctgc tgttcatggg cgtggacgta atgttctct ccttgtccta ttttctgata 660
 atacgaacgg ttctgcaact gccctccaag tcagagcggg ccaaggccct tggaaacctgt 720
 gtgtcacaca ttgtgtgggt actgccttc tattggccac ttattggcct ctcatgtgta 780
 caccgcttgg gaaacagcct tcattccatt gtgcgtgttg tcattgggtga catctacctg 840
 ctgtgccttc cgtgcatcaa tcccatcctc tatggtgcca aaaccaaaca gatcagaaca 900
 cgggtgctgg ctatgttcaa gatcagctgt gacaaggact tgcaggctgt gggaggcaag 960
 tga 963

<210> 527

<211> 320

<212> PRT

<213> Homo sapiens

<400> 527

Met Ser Ser Cys Asn Phe Thr His Ala Thr Phe Val Leu Ile Gly Ile
5 10 15

Pro Gly Leu Glu Lys Ala His Phe Trp Val Gly Phe Pro Leu Leu Ser
20 25 30

Met Tyr Val Val Ala Met Phe Gly Asn Cys Ile Val Val Phe Ile Val
35 40 45

Arg Thr Glu Arg Ser Leu His Ala Pro Met Tyr Leu Phe Leu Cys Met
50 55 60

Leu Ala Ala Ile Asp Leu Ala Leu Ser Thr Ser Thr Met Pro Lys Ile
65 70 75 80

Leu Ala Leu Phe Trp Phe Asp Ser Arg Glu Ile Ser Phe Glu Ala Cys
85 90 95

Leu Thr Gln Met Phe Phe Ile His Ala Leu Ser Ala Ile Glu Ser Thr
100 105 110

Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys His Pro
115 120 125

Leu Arg His Ala Ala Val Leu Asn Asn Thr Val Thr Ala Gln Ile Gly
130 135 140

Ile Val Ala Val Val Arg Gly Ser Leu Phe Phe Phe Pro Leu Pro Leu
145 150 155 160

Leu Ile Lys Arg Leu Ala Phe Cys His Ser Asn Val Leu Ser His Ser
165 170 175

Tyr Cys Val His Gln Asp Val Met Lys Leu Ala Tyr Ala Asp Thr Leu
180 185 190

Pro Asn Val Val Tyr Gly Leu Thr Ala Ile Leu Leu Val Met Gly Val
195 200 205

Asp Val Met Phe Ile Ser Leu Ser Tyr Phe Leu Ile Ile Arg Thr Val
210 215 220

Leu Gln Leu Pro Ser Lys Ser Glu Arg Ala Lys Ala Phe Gly Thr Cys
225 230 235 240

Val Ser His Ile Gly Val Val Leu Ala Phe Tyr Val Pro Leu Ile Gly
245 250 255

Leu Ser Val Val His Arg Phe Gly Asn Ser Leu His Pro Ile Val Arg
260 265 270

Val Val Met Gly Asp Ile Tyr Leu Leu Leu Pro Pro Val Ile Asn Pro
 275 280 285

Ile Ile Tyr Gly Ala Lys Thr Lys Gln Ile Arg Thr Arg Val Leu Ala
 290 295 300

Met Phe Lys Ile Ser Cys Asp Lys Asp Leu Gln Ala Val Gly Gly Lys
 305 310 315 320

<210> 528
 <211> 20
 <212> DNA
 <213> Homo Sapien

<400> 528
 actatggtcc agaggctgtg

20

<210> 529
 <211> 20
 <212> DNA
 <213> Homo Sapien

<400> 529
 atcacctatg tgccgcctct

20

<210> 530
 <211> 1852
 <212> DNA
 <213> Homo sapiens

<400> 530
 ggcacagaaa ttaaaaccct cagcaaaaaca ggcataagaag ggacataacct taaagtaata 60
 aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaaa gttagaagca 120
 tttcctctga gaactgcaac aataaataca aggatgctgg attttgtcaa atgccttttc 180
 tgtgtctgtt gagatgctta tgtgactttg ctttaaatc tgtttatgtg attatcaat 240
 ttattgactt gctgtgttta gaccggaaga gctgggtgtt ttctcaggag ccaccgtgtg 300
 ctgcggcagc ttccggataa cttgaggctg catcaactgg gaagaaacac aytctgtcc 360
 gtggcgtga tggtcgagga cagagcttca gtgtggcttc tctgcgactg gcttctcgg 420
 ggagtctctc ctctcatagt catccatag gtccagagg aaaaattat tttttgtta 480
 tggatgaaga gtattacgtt gtgcagatat actgcagtgt ctctcatctc tgatgtgtga 540
 ttgggtaggt tccaccatgt tgccgcagat gacatgatt cagtacctgt gtctggctga 600
 aaagtgtttt tttgtgaatg gatattgtgg tttctggatc tcatctctgt tgggtggaca 660
 gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata 720
 ccatgtgca tgcctcttcc atttctgca tttctctcct cctggatgga cagggggagc 780
 ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa gacgtctggg 840
 agcaagaggt gcaagtgggt ctgccactgc ttccctctgt gcagggggag cgccaagagc 900
 aacgtgtgtg cttggggaga ctacgatgac agcgccttca tggatcccag gtaccacgtc 960
 catggagaag atctggacaa gctccacaga gctgcctgtt ggggtaaaagt ccccgagaag 1020
 gatctcatg ctatgctcag ggacacggat gtgaacaaga gggacaagca aaagaggact 1080
 gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactgtg gctggacaga 1140
 cgatgtcaac ttaatgtctc tgacaacaaa aagaggacag cctcgacaaa ggccgtacaa 1200
 tgcagggaag atgaatgtgc gttaatgttg ctggaacatg gcactgatcc aaatatccca 1260
 gatgagtatg gaattaccac tctacactat gctgtctaca atgaagataa ataatgtgcc 1320
 aaagcactgc tcttatcagg tctgtatc gaatcaaaaa acaagcatgg cctcacacca 1380
 ctgctacttg gtatcacatg gcaaaaaacag caagtgtgta aatttttaat caagaaaaaa 1440
 gcgaatttaa atgcgcgtgga tagatatgga agaactgctc tcatcttggc tgtatgtgtg 1500
 ggatcagcaa gtatagtcag ccctctactt gagcaaatg ttgatgtatc ttctcaagat 1560
 ctggaaagac ggccagagag tatgctgttt ctatgcatca tcatgtaatt tgccagttac 1620

```

ttttctgacta caaagaaaaa cagatgttaa aaatctcttc tgaaaacagc aatccagaac 1680
aagacttaaa gctgacatca gaggaagagt cacaagggtc taaaggaagt gaaaacagcc 1740
agccagagctc agaagattta tggctattga agaagaatga agaacacgga agtactcatg 1800
tgggattccc agaaaaacctg actaacgggtg ccgctgctgg caatggtgat ga 1852

```

```

<210> 531
<211> 879
<212> DNA
<213> Homo sapiens

```

```

<400> 531
atgcatcttt catttctgc atttcttctt ccctggatgg acagggggag cggaacagagc 60
aacgtgggca cttctggaga ccacaacgac tcctctgtga agacgcttgg gagcaagagg 120
tgcaagtggg gctgccactg ctccccctgc tgcaggggga gcggcaagag caacgtgggtc 180
gcttggggag actacgatga cagcgctctc atggatccca ggtaccacgt ccaatggagaa 240
gatctggaca agctccacag agctgctctg tggggtaaag tccccagaaa ggatctctac 300
gtcatgtcta gggacacgga tgtgaacaag agggacaagc aaaagaggac tgctctacat 360
ctggcctctg ccaatgggaa ttccagaagta gtaaaactcg tgctggacag acgatgtcaa 420
cttaatgtcc ttgacaacaa aaagaggaga gctctgacaa aggcctgaca atgccaggaa 480
gatgaatgtg cgttaatgtt gctggaacat ggcactgac caaatattcc agatgagat 540
ggaaatacca ctctacata tgctgtctac aatgaagata aattaatggc caaagcactg 600
ctcttatacg gtgctgatat cgaatcaaaa aacaagcatg gcctcacacc actgctactt 660
ggatatacatg agcaaaaaa gcaagtgggtg aaatttttaa tcaagaaaaa agcgaattta 720
aatgcgctgg atagatatgg aagaactgct ctcatacttg ctgtatgttg tggatcagca 780
agtatatgca gccctactct tgagcaaaat gttgatgtat ctctcaaga tctggaaaga 840
cggccagaga gtatgctgtt tctagtcac atcatgtaa 879

```

```

<210> 532
<211> 292
<212> PRT
<213> Homo sapiens

```

```

<400> 532
Met His Leu Ser Phe Pro Ala Phe Leu Pro Pro Trp Met Asp Arg Gly
          5                      10                      15

Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asn Asp Ser Ser
          20                      25                      30

Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp Cys Cys His Cys Phe
          35                      40                      45

Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Val Ala Trp Gly Asp
          50                      55                      60

Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr His Val His Gly Glu
          65                      70                      75                      80

Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg
          85                      90                      95

Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Arg Asp
          100                     105                     110

Lys Gln Lys Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser
          115                     120                     125

Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys Gln Leu Asn Val Leu

```

130 135 140

Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala Val Gln Cys Gln Glu
145 150 155 160

Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile
165 170 175

Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Val Tyr Asn Glu
180 185 190

Asp Lys Leu Met Ala Lys Ala Leu Leu Tyr Gly Ala Asp Ile Glu
195 200 205

Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Ile His Glu
210 215 220

Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu
225 230 235 240

Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys
245 250 255

Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu Glu Gln Asn Val Asp
260 265 270

Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu Ser Met Leu Phe Leu
275 280 285

Val Ile Ile Met
290

<210> 533
<211> 801
<212> DNA
<213> Homo sapiens

<400> 533

atgtacaagc ttcagtgcac caactgtgct acaaatggag ccacagagag gaaacaagca 60
gcaggctcag gacgagggtat tgcgctgcct tcggctctcc aatccatgcc tcagggctcc 120
tatgccactg caagattctt ggttgccaag aggcacaacca caggccatct tgagaaggag 180
tttatgttcc actgcagaaa gcagccaggga tcacatcca ggggacttgg tctctgtgg 240
ccctggccag acatagaatt tgtgccaaag caggacaagc tcaactcagag cagcgtgtta 300
gtacctcaaa tctgtgcgtg ccagacaagg ccaactggc tcaatgagca accagccacc 360
ctcgacgggg tgcgtctgga ggaggtggac cagccacca ccttaccag tcaaggaggt 420
ggatggccat gttccacacg cctgagtggtg tgccaactga tggctgatag agcaagggcc 480
taggaaaagc cagatggccc ttggccctac cttttgtta gaagaactga tgttccatgt 540
cctgcagcga actgagttgg tggctgtgcc ccagctcct ggacacacct ggcagaggtg 600
actggtgtct ctttgagccc tcttagcctt gccagcatg cacaagctc agtgactacta 660
ctgtgctaca aatggagcca tataggggaa acgagcagcc atctcaggag caaggtgtat 720
gctgcctttg ggggtccag tccctgctc aagggtctta tgtcactgtg ggctcttgg 780
ttgccaagag gcagaccata g 801

<210> 534
<211> 266
<212> PRT
<213> Homo sapiens

<400> 534

Met Tyr Lys Leu Gln Cys Asn Asn Cys Ala Thr Asn Gly Ala Thr Glu
5 10 15

Arg Lys Gln Ala Ala Gly Ser Gly Ala Gly Tyr Ala Leu Pro Ser Ala
20 25 30

Leu Gln Ser Met Pro Gln Gly Ser Tyr Ala Thr Ala Arg Phe Leu Val
35 40 45

Ala Lys Arg Pro Thr Thr Gly His Leu Glu Lys Glu Phe Met Phe His
50 55 60

Cys Arg Lys Gln Pro Gly Ser Pro Ser Arg Gly Leu Gly Leu Leu Trp
65 70 75 80

Pro Trp Pro Asp Ile Glu Phe Val Pro Arg Gln Asp Lys Leu Thr Gln
85 90 95

Ser Ser Val Leu Val Pro Gln Ile Cys Ala Cys Gln Thr Arg Pro Asn
100 105 110

Trp Leu Asn Glu Gln Pro Ala Thr Ser Ala Gly Val Arg Leu Glu Glu
115 120 125

Val Asp Gln Pro Pro Thr Leu Pro Ser Gln Gly Ser Gly Trp Pro Cys
130 135 140

Ser His Ser Leu Ser Gly Cys His Leu Met Ala Asp Ile Ala Lys Ala
145 150 155 160

Leu Gly Lys Ala Asp Gly Pro Trp Pro Tyr Leu Phe Val Arg Arg Thr
165 170 175

Asp Val Pro Cys Pro Ala Ala Ser Glu Val Gly Gly Cys Ala Pro Ser
180 185 190

Ser Trp His Thr Leu Ala Glu Val Thr Gly Cys Ser Leu Ser Pro Leu
195 200 205

Ser Leu Ala Gln His Ala Gln Ala Ser Val Leu Leu Leu Cys Tyr Lys
210 215 220

Trp Ser His Ile Gly Glu Thr Ser Ser His Leu Arg Ser Lys Val Tyr
225 230 235 240

Ala Ala Phe Gly Gly Ser Ser Pro Cys Leu Lys Gly Leu Met Ser Leu
245 250 255

Trp Ala Ser Trp Leu Pro Arg Gly Arg Pro
260 265

<210> 535

<211> 6082

<212> DNA

<213> Homo sapiens

<400> 535
 cctccactat tacagcttat agggaaattac aatccacttt acaggccctca aaggttcatt 60
 ccgcccgagc ggcacaggcgt ggcggccgga gccccagcat cccctgcttga ggtccaggag 120
 cggagcccgcc ggcactgcc gccctgatcag cgcgaccccg gccccgcccc gcccccgccc 180
 gcaagctgct gccctgtgtac caggaggtga agcccaaccg gctgcaggag cgcaacctct 240
 gctcacgcgt gttctctctgg tggctcaact ccttgtttaa aattggccat aaacggagat 300
 tagaggaaga tgatatgtat tcaagtctgc cagaagaccg ctcacagcac cttgcaggag 360
 agttgcaagg gttctgggat aaagaagtgt taagagctga gaatgacgca cagaagcctt 420
 ctttaacaag agcaatcata aagtgttact ggaacttta tttagtttgg tttatttta 480
 cgtaaatgta ggaagtgcc aagtaatcc agcccatatt tttggaaaaa attatttaatt 540
 tttttgaaaa ttttgatccc atggattctg tggcttggaa cacagcgtae cttactgcca 600
 cgggtgctgac tttttgcaag ctcatcttgg ctatactgca tcacttatat ttttatcaag 660
 ttcagtgtgc tgggatgagg ttacagagtac ccattgtgca tatgatattat cggaaaggcac 720
 ttctgtcttag taacatggcc atggggaaga caaccacagg ccagatagtc aatctgctgt 780
 ccaatgatgt gaacaagtgt gatcagggtga cagtgtctct acacttctgt tgggcaggac 840
 cactgcaggc gatcgacgt actgccctac tctggatgga gataggaata tctgtccctg 900
 ctgggattgac agttctaact attctcctgc ccttgcaagg ctgttttggg aagttgtct 960
 catacctgag gatgtaaaact gcaactttca cggatgccag gatcaggacc atgaatgaa 1020
 ttataactgg tataaggata ataaaaatgt acgctcgga aaagtcatct tcaaatctta 1080
 ttaccaattt gagaagaag gagatttcca agattctgag aagttctgcg ctacagggga 1140
 tgaatttggc ttctgttttc agtgcaagca aaatcatcgt gttgtgacc tccaccaact 1200
 cagtgctcct cggcagtggt atcacagcca gccgcgtgtt cgtggcagct agcgtgtatg 1260
 gggctgtgct gctgacggtt accctctctc tccctcagc cattgagagg gtgtcagagg 1320
 caatcgctag catccgaaga atccagacct tttgtctact tgatgagata ctacagagca 1380
 accgtcagct gccgtcagat ggtaaaaaga tgggtcagat gcaggatttt actgcttttt 1440
 gggataaggc atcacagacc ccaactctac aaggccttcc ctctactgtc agacccgtgg 1500
 aattgttagc tctgtctggc ccgctgggag cagggaagtc atcaactgtc agtcgctgtc 1560
 tccgggaatt ggcctcaagt cacgggctgg tcagcgtgca tggagaatct gcctatgtgt 1620
 ctgggacgcc ctgggtgttc tggggaactc tattttattt tgaaggatga actgtaaat 1680
 acgaaaagga acgatatgaa aaagtcataa aggcctgtgc tctgaaaaag gatttacagc 1740
 tgttggagga tgggtgatctg actgtgatag gagatcgggg aaccacgctg agtggagggg 1800
 agaaagcacg ggttaacctt gcaagagcag tgtatcaaga tctgtacatc tatctcctgg 1860
 acgatctctc cagtcagta gatcggaag tttagcagaca cttgtctgaa ctgtgtattt 1920
 tcaaaatttt gcatgagaag atcacaattt tagtgactca tcagttcgag taacctcaa 1980
 ctgcaagttc gattctgata ttgaaagatg gtaaaatggt gcaagaaggg acttacactg 2040
 agttcctaaa atctggtata gattttggct cctttttaa gaaggataat gaggaagtgt 2100
 aacaaactcc agttccaggga actccacac taaggaatcg taacctctca ggtctctgg 2160
 tttggtctca acaactctct agaccctcct tgaagaatgg tgctctggag agccaagata 2220
 cagagaatgt cccagttaca ctatcagagg agaaccgtc tgaaggaaaa gttggtttc 2280
 aggcctataa gaattacttc agagctgggt ctcatggat tgcctcaat tctctattc 2340
 tcttaaacac tgacgtcag gttgcctatg tgcctcaaga ttggtggctt tcatcactgg 2400
 caaacacaac aatgatgcta aatgtcactg taaaatggag aggaatgta accggaagac 2460
 tagatcttaa ctggtactta ggaatttatt caggtttaac tggatctacc gtctctttg 2520
 gcatagcaag atctctattg gtattctacg tctctgttaa ccttcaaca cttttgca 2580
 acaaaattgt tgaagtcaatt ctgaaagctc cgttattatt ctttgataga aatccaatg 2640
 gaagaaattt aaatcggttc tccaagaca ttggacactt ggaatgatt ctgccagt 2700
 cgttttttgc ttgatccag acattgtctac aagtggttgg tgggtctctc gtgctgtg 2760
 ccgtgatcc ttggatcgca atacccttg ttcccttgg aatcatttc attttctc 2820
 ggcgatatt ttgggaaag tcaagagatg tgaagccct ggaatctca actcggagc 2880
 cagtggtttc ccaactgtca tctctctcc aggggctctg gaccatcgg cactacaag 2940
 cagaagagag gtgtcaggaa ctgtttgatg cacaccagga tttacattca gaggttgtg 3000
 tctgtttttt gcaacagctc cgtcgggtcg ccgtccgtct ggaatccatc tgtgccatg 3060
 ttgtcatcat cgttgccttt ggttccctga tcttggcaaa aactctggat gccggcagg 3120
 ttggttttgc actgtccctat gccctcagc tcatgggagt gtttcagtg tgtgtcgac 3180
 aaagtctctg agttgagaat atgatgatct cagtagaag ggtcattgaa tacaagac 3240
 ttgaaaaaga agcaaccttg gaatatcaga aacgccacc accagcctg ccccatga 3300
 gagtgataat ctttgacaat gtgaacttca tgtcacgtc agtgggctc ctggtgact 3360

```

agcatctgac agcactcatt aaatcacaaag aaaaggttg cattgtggga agaaccggag 3420
ctggaaaagg ttccctcacc tcagcccttt ttagattgtc agaaccggaa ggtaaaaattt 3480
ggatttgataa gatcttgaca actgaaattg gacttcacga tttagggaag aaaaatgtcaa 3540
tcatacctca ggaacctgtt ttgttcaact gaacaatgag gaaaaacctg gatcccttta 3600
atgagcacac ggaatgaggaa ctgtggaatg ccttacaaga ggtacaactt aaagaaacca 3660
tgaaagatct tccgtgtaaa atggatactg aattagcaga atcaggatcc aattttagt 3720
ttggacaaga acaactgtgtg tgccttgcca gggcaattct caggaaaaat cagatatga 3780
tatttgatac agcagcgcca aatgtggatc caagaactga tgagttaaat caaaaaaaat 3840
ccgggagaaa ttgcccact gcaccgtgct aaccattgca cacagattga acaccattat 3900
tgacagcgac aagataatgg ttttagattc aggaagactg aaagaatatg atgagccgta 3960
tgttttctg caaaataaag agagcctatt ttacaagatg gtgcacaacac tgggcaaggc 4020
agaagccgct gccctcactg aaacagcaaa acaggtatac ttcaaaaaa attatccaca 4080
tattgttcac actgaccaca tggttacaaa cacttccaat ggacagccct cgaccttaac 4140
tattttcgag acagcactgt gaatccaacc aaaatgtcaa gtccgttccg aaggcatttg 4200
ccactagttt ttggactatg taaaccacat tgtacttttt ttacttttg caacaaatat 4260
ttatacacia aagatgtctg ttcatgttaa tatttccc aacttatcca aggatctcca 4320
gctctaacaa aatggtttat ttttatttaa atgtcaatag ttgtttttta aactccaat 4380
cagagtgcca gccaccactg taaatgccgt ctatcagggt ttgtgcctta agagactaca 4440
gagtcacaa gcatttttaa aggaagttaga cagagttgtc acaggttttt ttgtttttt 4500
tatttgcccc caaaattaca tggtaatttc catttatata agggattcta ttacttgaa 4560
gactgtgaga ttgccatttt gtctcattgt tttcttggac taactagga tccattattt 4620
ccccgtaaag ctctctgtta gaaaatagta cagttacaac caataggaa acaaaaaaga 4680
aaaaagttgt gacattgtag tagggagtgt gtaccctta ctcccacata aaaaaaaa 4740
tggatacatg gttaaaggat agaagggcaa tatttatca tatgttctaa aagagaagg 4800
agagaaaata ctactcttc aaaaatgaa cctttaaagg tgctttgata ctgaaaggca 4860
caaatgtgac cgtccatcct cctttagagt tgcactact ggacacggt aactgtgcag 4920
ttttagactc agcatgtgta cacttcccaa gaaggccaaa cctctaaccg acatctctga 4980
aatacgtgac attatctctt ttggatttc tcatttatgg aaggctaacc ctctgttgac 5040
tgtaagccct ttggtttggg ctgtattgaa atcctttcta aatgtcatga ataggtctg 5100
ctaacgtgat gagacaaact gaaaattatt gcaagcattg actataatta tgcagttaac 5160
tctcaggatg catccagggg ttcattttca tgagcctgtc caggttagtt tactctcag 5220
ctcaaatagc attgtcattt gggccttctg ttgaatgaat caacaaacca caactctcc 5280
tgggaccttt tgaactttat ttgaactatg agtctttaat ttttctgat gatgtggct 5340
gtaatatgtt gagttcagtt tactaaaagg ttactatta ttgtttgaag ttgaggtct 5400
tgacctctca gaataagggt tcacctccct gaaattgcat atatgtat atagactgac 5460
acgtgtgcat ttgtttgtat acatatattt gtccttoga tagcaagttt ttgtctcac 5520
agcagagagc aacagatggt ttattgagtg aagccttaaa aagcacacac cacacacagc 5580
taactgccaa aatacatgta ccgtagtagc tgttcaacct ctagtacta gaaatacacg 5640
tatggttaat gttcagttca acaaaaccac cacagtaaat gtttataat agtcctggtt 5700
cgtattttat gtgactgaaa ttgcaacagt gatcataatg aggtttgta aatatgagc 5760
tatattcaaa atgctctaat gtttatttgg acttttgagg ttaaagacag tcatataaac 5820
gtccctgttc tggtttaatg ttatcataga attttttaat gaaactaaat tcaattgaaa 5880
taaatatag ttttcatctc caaaaaaaa gggcgccgtc gggcgccgtc gagtctagag 5940
ggcccggtta aaccgcgtga tcagcctcga ctgtgccttc tagttgccag ccactgtgtg 6000
tttgcctcc ccccgctcct tccctgacc ttggaaggtgc cactcccatg gtcctttcct 6060
aataaaatga ggaattgca tc 6082

```

<210> 536
 <211> 6140
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(6140)
 <223> n=A,T,C or G

<400> 536

cagtgaggcga	gtctcagctc	actgcagcct	ccacctctctg	tgttcaagca	gtctcctctgc	60
ctcagccacc	agactcagcag	gtctcccccgc	cctctttctt	ggaaggacac	tgcacattgg	120
atttaggcac	ctactgggata	atccaggatg	atgtcttcac	tccaacatcc	taaggttaat	180
tccattgtgca	aatacccttt	tccaaaaata	cattcaattc	tttaccagga	aagggtggctc	240
aatcccttgt	ttaaaattgg	ccataaacgg	agattagag	aagatgatat	gtattcagtg	300
ctgcaggaga	acgcgtcaca	gcaccttggg	gaggagttgc	aagggttctg	ggataaaaga	360
gttttaagag	ctgagaatga	cgcacagaag	ccttctttaa	caagagcaat	cataaaagt	420
cttggaatat	cttatttagt	tttgggaatt	tttactgtta	ttgaggaaag	tgcocaaagt	480
atccagccca	tatttttggg	aaaaattatt	aattattttg	aaaattatga	tcccatggat	540
ctctgtgctt	tgaacacagc	gtacgcctat	gccacggtgc	tgactttttg	cagctcat	600
ttggctatac	gtccatcact	atatttttat	cacgttcagt	gtgctgggat	gaggttacga	660
gtagccatgt	ggccatattgat	ttatcgggaag	gcactctgtc	ttagtaacat	ggccctgggg	720
aagacaacca	caggccagat	agtcaatctg	ctgtccaatg	atgtgaacaa	gtttgatcag	780
gtgacagtgt	tcttacactt	cctgtgggca	ggaccactgc	agggcatcgc	agtgaactgcc	840
ctactctgga	tggagatagg	aatatcgtgc	cttgcctggga	tggcagttct	aatcattctc	900
ctgcctcttg	aaagctgttt	tgggaagtgt	ttctcatcac	tgaggagtaa	aactgcaact	960
ttccagctgt	ccagatcag	gacctgaat	gaagtataag	ctggtataag	gataataaaa	1020
atgtacgcct	tggaanaagtc	attttcaaat	cttattacca	atttgagaaa	gaaggagatt	1080
tccaagaatc	tgaagaattc	gcctccagg	ggagatgaat	tggcttcgtt	tttcagtgtca	1140
agcaaaatca	tgtgttttgt	gaccttcacc	acctacgtgc	tctcggcgac	tggtatcaca	1200
gccacggaga	tcgtctgggc	agtgacgctg	tatgggctg	tgcggctgac	ggttaccctc	1260
ttcttccctc	cagccattga	gaggggttca	gaggcaatcg	tcagcatccg	aagaaatccag	1320
acctttttgc	tactgtatga	gatatcacag	cgcacacgtc	agctgcgctg	agatgtgaaa	1380
aagatggctg	atgtgcagga	ttttactgct	ttttgggata	agggcatcaga	gaccccaact	1440
ctacaaggcc	tttctcttac	tgtoagacct	ggcgaattgt	tagctgtggt	cgcccccgtg	1500
ggagcaggga	agtcacact	gttaagtgc	gtgctcgggg	aattggccgg	aagtcacggg	1560
ctggtcagcg	tgcattggaag	aattgacctat	gtgtctcagc	agccctgggt	gttctcggga	1620
actctgagga	tgaatttttt	atttgggaag	aaatacgaag	aggaacgata	tgaanaagtc	1680
ataaaggctt	gtgctctgaa	aaaggattta	cagctgttgg	aggatgggtga	tctgactgtc	1740
ataaggagatc	ggggaaaccac	gctgagtgtga	gggcagaaaag	cacgggtgaa	ccttgcaaga	1800
gcagtgtatc	aagatgtctga	catctatctc	ctggacgatac	ctctcagtcg	agtagatcgc	1860
gaagttagca	gacacttgtt	cgaactgtgt	atttgtcaaa	ttttgcatag	gaagatcaca	1920
attttagtga	ctcatcagtt	gcagtacctc	aaagctgcaa	gcagattctc	gatattgaaa	1980
gatggtaaaa	tgtgtgcagaa	ggggacttac	actgagttcc	taaaatctgg	tatagatttt	2040
ggctcccttt	taagcaagga	taatgaggaa	agtgaaacac	ctccagttcc	aggaactccc	2100
acactaagta	atcgtacact	ctcagactct	tcggtttgtt	ctcaacaatc	ttctagaccc	2160
tccgtgaaag	atgtgtctct	ggagagccaa	gatacagaga	atgtcccagt	tacaactaca	2220
gaggagaacc	gttctgaagg	aaaagttygt	tttcaggcct	ataagaatta	cttcagagct	2280
ggtgctcact	ggattgtcct	cattttcctt	attctcctaa	acactgcagc	tcaggttgcc	2340
tatgtgcttc	aaagattggt	gctttcatac	tggggcaaaa	aacaaagtat	gctaaagtgc	2400
ctcttaaatg	gaggaggaaa	tgtaacccgag	aagctagatc	ttaactggta	ctttgaagtt	2460
tattcaggtt	ttaactgtagc	tacggttctt	tttggcatag	caagatctct	attgttatct	2520
tacgtctctg	ttaactcttc	acaaaacttg	cacaaacaaa	tgtttgagtc	aattctgaaa	2580
gctccggtat	tattctttga	tagaaatcca	ataggagaag	ttttaaatcg	ttttccaaa	2640
gacattggac	acttcgatga	tttgcctgcg	ctgacgtttt	tagatttcat	ccagacattg	2700
ctacaagttg	ttgtgtgtgt	ctctgtggct	gtggccgtga	ttccttggtat	cgcataaccc	2760
ttgtgtcccc	tttgaatcat	tttcattttt	cttcggcgat	atttttttga	aggaactaga	2820
ctatgtgaagc	gctctggaatc	tacaactcgg	agtcacgtgt	tttccacttt	gtcatctctt	2880
gctgcagggg	ctctggacat	ccgggcatac	aaagcagaag	agaggtgtca	ggacactgttt	2940
gatgcacacc	agggatttaca	ttcagaggct	tggttctgtg	ttttgacaac	gtcccgtgct	3000
ttcgcgctgc	gtctgatgac	catctgtgcc	atgtttgtca	tcatgtttgc	ctttgggtcc	3060
ctgattctgtg	caaaaaactct	ggatgcgggg	caggttggtt	tggcactgtc	ctatgccttc	3120
acgtctcagtg	ggatgtttca	gtggtgtgta	cgacaaagtg	ctgaagttga	gaatatgatg	3180
atctcagtag	aaagggctcat	tgaataacaca	gaccttgaaa	aagaagcaccc	ttgggaatat	3240
cagaaaacgcc	caccacacgc	ctggcccatc	gaaggagtga	taattcttga	caatgtgaac	3300
ttcatgtatc	ctccaggttg	gcctctggta	ctgaagcatc	tgacagcact	cttaaatata	3360
caagaaaaagg	tggcatttgt	gggaagaacc	ggagctggaa	aaagttccct	catctcagcc	3420
cttttttagat	tgtcagaacc	cgaaggtaaa	atttgattg	ataagattct	gacaactgaa	3480

attggaactt	acgatttttaq	gaagaaaatg	tcaatcatac	ctcaggaacc	tgttttgttc	3540
actgacgaaca	tggagaaaaa	octggaatccc	ttaatatgag	acacagctga	ggaactgtgt	3600
aatgccttac	aaagaggtaca	acttaaaagac	accattgaag	atctctccgt	taaaatggat	3660
actgaattag	cagaatcagg	atccaatttt	agtgttgtag	aaagacaact	ggtgtgcctt	3720
gccagggcaa	tcttcaggaa	atacatagata	tgtgattatt	atgaaagcgc	ggcaaatggt	3780
gatccaagaa	ctgtagagtt	aatacaaaaa	aaaatccggg	agaaattttg	ccaactgcac	3840
gtgtacaacca	tgtgcacagt	atgtgaacact	attattgaca	gcgaacagat	aatgtgttta	3900
gattcaggaa	gactgaagaa	atattgatgat	ccgtatggt	tgtctcaaaa	taaaagagagc	3960
ctatttttaca	agatgggtga	acaaactgggc	aggcagagga	ccgctgcgct	caactgaaca	4020
gcataacacga	gatgggggtt	caccattagt	gccagcgctg	tcttaaaact	ctgacctcaa	4080
ctatttttaca	tgccttggcc	tcccaaatgt	ctgagatatt	agctgtgagc	ccacacgccgc	4140
aacctgagta	tacttcaaaa	gaaattatcc	acatatttgt	caacactgac	acatggttat	4200
aaacacttcc	aatggacagc	octcgacctt	acattatttc	gagacagcac	tgtgaataca	4260
accaaaatcc	caagtccggt	ccgaaggcct	tgttccaact	tattttgact	tgtataaaca	4320
caattgtactt	tttttttact	tggcaacaaa	tattataaca	tacaagtgat	tagttctact	4380
gaatatttct	cccacattat	ccaaggtatc	ccaagctcaa	caaaatgggt	tatttttatt	4440
taaatgttca	tagtktgktt	ctaaatata	acatcagaggt	ggagccctga	acgttaaatg	4500
cgtctatcag	gttttgtgcc	ttaagaact	acacnagcta	gcagctcatt	tttaaaaggc	4560
taggcacagag	tgtgcacagg	tttttgtgtg	tgttttkttt	gcccccacaa	ctactgttta	4620
atttccattc	atatcagggt	octtatatta	cttgaagact	gtgaagttgc	taattctgtt	4680
catgtgttct	tgttgacatm	ctaggtatoca	tattttcccc	tgaaggcttc	tgtagaagaa	4740
tagtacctgt	acaaaccaat	ggaactamca	ataaaagaaa	gttttgtgca	tgtgatagat	4800
gggtgtgtac	cccttatact	ccatcaataa	aaaaaatgga	tacatgtttg	aaggatagaa	4860
ggcgaaattt	tttcatatgc	tctctaaaaa	gaggaagaa	aaaatactact	tttctcaaaa	4920
tggaaagccct	taaaagtgct	tgtgtactga	aggacacaaa	tgtgaccctt	catctctctt	4980
tagagtgcga	tgcactggac	acgtgaactg	tctcaggttt	agactacgca	tgttgacact	5040
tcccagaagag	gtccaaacct	taaccgcact	tctgaamtat	ctgtggcatt	ttcttttttg	5100
gactttctcat	ttaggaagct	taacccctgt	ttcagttgtm	kcctttttgt	tggggctgtg	5160
tttaaatcct	tcttaaatgt	catgtaatga	ctctgtctac	cgctgatgaa	caaaactgaa	5220
attattgtcaa	gcattgaact	taattatgca	tgcagttctt	aggatgcact	cagggggttca	5280
ttttctgtga	octgtccagg	ttagtttaact	octcgaoact	ataagacttt	tcaattttgt	5340
acaatgtgact	atgaataact	aaaccacaat	actctctggg	accttttgta	cttatttgta	5400
actgttgatc	tttaattgct	octgatgatc	gtgctgtgaa	tatgttgagt	tcaggtttgt	5460
ttctgtcttc	ctatatatga	ttagaaggag	tctcatgacc	ctatgagaaa	ggtgcacctc	5520
gtgaagccct	gtatagcaag	tattttgtct	atcagcagag	cattgtgtgt	tatacatata	5580
agctgttcaa	aaaaagcaca	ccaccacaca	agctaactgc	agcaaacagat	gtttttatga	5640
acacacagat	ctctagact	ttagaataat	acgtatggtt	caaaaatacat	tgacctagtt	5700
agtgatcata	aatgtttatt	ataatgtcat	tgtctgattt	aatgttcagt	ccaacacacc	5760
tgagcttttg	ataggtttgt	ttaaaatgat	acgtcatatt	taggttgact	aaatgtcaac	5820
agaaattttt	aggttaaaaga	cagtcatacat	acgcctctgt	ttctgtttta	atgtttatatt	5880
aaaaaaatgg	aatgaaacta	aattcaattg	aaataaattg	tagttttttt	ctccaaaaaa	5940
cgaactgtgc	ggcgcccgcg	tcgagttctg	aggccggcgt	tttaaacccg	tgtacgacct	6000
ctctggaagg	ttctatgtgc	cagccatctg	tgttttggcc	ctcccccggt	ccctctctga	6060
	ggccactccc					6120
						6140

```
<210> 537
<211> 1228
<212> PRT
<213> Homo sapiens
```

<400> 537
Met Leu Pro Val Tyr Gln Glu Val Lys Pro Asn Pro Leu Gln Asp Ala
 5 10 15

Asn Leu Cys Ser Arg Val Phe Phe Trp Trp Leu Asn Pro Leu Phe Lys
20 25 30

Ile Gly His Lys Arg Arg Leu Glu Glu Asp Asp Met Tyr Ser Val Leu
 35 40 45
 Pro Glu Asp Arg Ser Gln His Leu Gly Glu Glu Leu Gln Gly Phe Trp
 50 55 60
 Asp Lys Glu Val Leu Arg Ala Glu Asn Asp Ala Gln Lys Pro Ser Leu
 65 70 75 80
 Thr Arg Ala Ile Ile Lys Cys Tyr Trp Lys Ser Tyr Leu Val Leu Gly
 85 90 95
 Ile Phe Thr Leu Ile Glu Glu Ser Ala Lys Val Ile Gln Pro Ile Phe
 100 105 110
 Leu Gly Lys Ile Ile Asn Tyr Phe Glu Asn Tyr Asp Pro Met Asp Ser
 115 120 125
 Val Ala Leu Asn Thr Ala Tyr Ala Tyr Ala Thr Val Leu Thr Phe Cys
 130 135 140
 Thr Leu Ile Leu Ala Ile Leu His His Leu Tyr Phe Tyr His Val Gln
 145 150 155 160
 Cys Ala Gly Met Arg Leu Arg Val Ala Met Cys His Met Ile Tyr Arg
 165 170 175
 Lys Ala Leu Arg Leu Ser Asn Met Ala Met Gly Lys Thr Thr Thr Gly
 180 185 190
 Gln Ile Val Asn Leu Leu Ser Asn Asp Val Asn Lys Phe Asp Gln Val
 195 200 205
 Thr Val Phe Leu His Phe Leu Trp Ala Gly Pro Leu Gln Ala Ile Ala
 210 215 220
 Val Thr Ala Leu Leu Trp Met Glu Ile Gly Ile Ser Cys Leu Ala Gly
 225 230 235 240
 Met Ala Val Leu Ile Ile Leu Leu Pro Leu Gln Ser Cys Phe Gly Lys
 245 250 255
 Leu Phe Ser Ser Leu Arg Ser Lys Thr Ala Thr Phe Thr Asp Ala Arg
 260 265 270
 Ile Arg Thr Met Asn Glu Val Ile Thr Gly Ile Arg Ile Ile Lys Met
 275 280 285
 Tyr Ala Trp Glu Lys Ser Phe Ser Asn Leu Ile Thr Asn Leu Arg Lys
 290 295 300
 Lys Glu Ile Ser Lys Ile Leu Arg Ser Ser Cys Leu Arg Gly Met Asn
 305 310 315 320
 Leu Ala Ser Phe Phe Ser Ala Ser Lys Ile Ile Val Phe Val Thr Phe
 325 330 335
 Thr Thr Tyr Val Leu Leu Gly Ser Val Ile Thr Ala Ser Arg Val Phe

340	345	350
Val Ala Val Thr Leu Tyr Gly Ala Val Arg Leu Thr Val Thr Leu Phe 355 360 365		
Phe Pro Ser Ala Ile Glu Arg Val Ser Glu Ala Ile Val Ser Ile Arg 370 375 380		
Arg Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile Ser Gln Arg Asn Arg 385 390 395 400		
Gln Leu Pro Ser Asp Gly Lys Lys Met Val His Val Gln Asp Phe Thr 405 410 415		
Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr Leu Gln Gly Leu Ser 420 425 430		
Phe Thr Val Arg Pro Gly Glu Leu Leu Ala Val Val Gly Pro Val Gly 435 440 445		
Ala Gly Lys Ser Ser Leu Leu Ser Ala Val Leu Gly Glu Leu Ala Pro 450 455 460		
Ser His Gly Leu Val Ser Val His Gly Arg Ile Ala Tyr Val Ser Gln 465 470 475 480		
Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly 485 490 495		
Lys Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala 500 505 510		
Leu Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly Asp Leu Thr Val Ile 515 520 525		
Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln Lys Ala Arg Val Asn 530 535 540		
Leu Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile Tyr Leu Leu Asp Asp 545 550 555 560		
Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg His Leu Phe Glu Leu 565 570 575		
Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr Ile Leu Val Thr His 580 585 590		
Gln Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile Leu Ile Leu Lys Asp 595 600 605		
Gly Lys Met Val Gln Lys Gly Thr Tyr Thr Glu Phe Leu Lys Ser Gly 610 615 620		
Ile Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn Glu Glu Ser Glu Gln 625 630 635 640		
Pro Pro Val Pro Gly Thr Pro Thr Leu Arg Asn Arg Thr Phe Ser Glu 645 650 655		

Ser Ser Val Trp Ser Gln Gln Ser Ser Arg Pro Ser Leu Lys Asp Gly
 660 665 670
 Ala Leu Glu Ser Gln Asp Thr Glu Asn Val Pro Val Thr Leu Ser Glu
 675 680 685
 Glu Asn Arg Ser Glu Gly Lys Val Gly Phe Gln Ala Tyr Lys Asn Tyr
 690 695 700
 Phe Arg Ala Gly Ala His Trp Ile Val Phe Ile Phe Leu Ile Leu Leu
 705 710 715 720
 Asn Thr Ala Ala Gln Val Ala Tyr Val Leu Gln Asp Trp Trp Leu Ser
 725 730 735
 Tyr Trp Ala Asn Lys Gln Ser Met Leu Asn Val Thr Val Asn Gly Gly
 740 745 750
 Gly Asn Val Thr Glu Lys Leu Asp Leu Asn Trp Tyr Leu Gly Ile Tyr
 755 760 765
 Ser Gly Leu Thr Val Ala Thr Val Leu Phe Gly Ile Ala Arg Ser Leu
 770 775 780
 Leu Val Phe Tyr Val Leu Val Asn Ser Ser Gln Thr Leu His Asn Lys
 785 790 795 800
 Met Phe Glu Ser Ile Leu Lys Ala Pro Val Leu Phe Phe Asp Arg Asn
 805 810 815
 Pro Ile Gly Arg Ile Leu Asn Arg Phe Ser Lys Asp Ile Gly His Leu
 820 825 830
 Asp Asp Leu Leu Pro Leu Thr Phe Leu Asp Phe Ile Gln Thr Leu Leu
 835 840 845
 Gln Val Val Gly Val Val Ser Val Ala Val Ala Val Ile Pro Trp Ile
 850 855 860
 Ala Ile Pro Leu Val Pro Leu Gly Ile Ile Phe Ile Phe Leu Arg Arg
 865 870 875 880
 Tyr Phe Leu Glu Thr Ser Arg Asp Val Lys Arg Leu Glu Ser Thr Thr
 885 890 895
 Arg Ser Pro Val Phe Ser His Leu Ser Ser Ser Leu Gln Gly Leu Trp
 900 905 910
 Thr Ile Arg Ala Tyr Lys Ala Glu Glu Arg Cys Gln Glu Leu Phe Asp
 915 920 925
 Ala His Gln Asp Leu His Ser Glu Ala Trp Phe Leu Phe Leu Thr Thr
 930 935 940
 Ser Arg Trp Phe Ala Val Arg Leu Asp Ala Ile Cys Ala Met Phe Val
 945 950 955 960

Ile Ile Val Ala Phe Gly Ser Leu Ile Leu Ala Lys Thr Leu Asp Ala
 965 970 975
 Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu Thr Leu Met Gly Met
 980 985 990
 Phe Gln Trp Cys Val Arg Gln Ser Ala Glu Val Glu Asn Met Met Ile
 995 1000 1005
 Ser Val Glu Arg Val Ile Glu Tyr Thr Asp Leu Glu Lys Glu Ala Pro
 1010 1015 1020
 Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp Pro His Glu Gly Val
 1025 1030 1035 1040
 Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser Pro Gly Gly Pro Leu
 1045 1050 1055
 Val Leu Lys His Leu Thr Ala Leu Ile Lys Ser Gln Glu Lys Val Gly
 1060 1065 1070
 Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser Leu Ile Ser Ala Leu
 1075 1080 1085
 Phe Arg Leu Ser Glu Pro Glu Gly Lys Ile Trp Ile Asp Lys Ile Leu
 1090 1095 1100
 Thr Thr Glu Ile Gly Leu His Asp Leu Arg Lys Lys Met Ser Ile Ile
 1105 1110 1115 1120
 Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met Arg Lys Asn Leu Asp
 1125 1130 1135
 Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp Asn Ala Leu Gln Glu
 1140 1145 1150
 Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro Gly Lys Met Asp Thr
 1155 1160 1165
 Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val Gly Gln Arg Gln Leu
 1170 1175 1180
 Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn Gln Ile Leu Ile Ile
 1185 1190 1195 1200
 Asp Glu Ala Thr Ala Asn Val Asp Pro Arg Thr Asp Glu Leu Ile Gln
 1205 1210 1215
 Lys Lys Ser Gly Arg Asn Leu Pro Thr Ala Pro Cys
 1220 1225
 <210> 538
 <211> 1261
 <212> PRT
 <213> Homo sapiens
 <400> 538
 Met Tyr Ser Val Leu Pro Glu Asp Arg Ser Gln His Leu Gly Glu Glu

5					10					15					
Leu	Gln	Gly	Phe	Trp	Asp	Lys	Glu	Val	Leu	Arg	Ala	Glu	Asn	Asp	Ala
			20					25					30		
Gln	Lys	Pro	Ser	Leu	Thr	Arg	Ala	Ile	Ile	Lys	Cys	Tyr	Trp	Lys	Ser
			35					40					45		
Tyr	Leu	Val	Leu	Gly	Ile	Phe	Thr	Leu	Ile	Glu	Glu	Ser	Ala	Lys	Val
	50					55					60				
Ile	Gln	Pro	Ile	Phe	Leu	Gly	Lys	Ile	Ile	Asn	Tyr	Phe	Glu	Asn	Tyr
	65					70					75				80
Asp	Pro	Met	Asp	Ser	Val	Ala	Leu	Asn	Thr	Ala	Tyr	Ala	Tyr	Ala	Thr
				85					90					95	
Val	Leu	Thr	Phe	Cys	Thr	Leu	Ile	Leu	Ala	Ile	Leu	His	His	Leu	Tyr
			100					105					110		
Phe	Tyr	His	Val	Gln	Cys	Ala	Gly	Met	Arg	Leu	Arg	Val	Ala	Met	Cys
		115						120					125		
His	Met	Ile	Tyr	Arg	Lys	Ala	Leu	Arg	Leu	Ser	Asn	Met	Ala	Met	Gly
	130					135					140				
Lys	Thr	Thr	Thr	Gly	Gln	Ile	Val	Asn	Leu	Leu	Ser	Asn	Asp	Val	Asn
	145					150					155			160	
Lys	Phe	Asp	Gln	Val	Thr	Val	Phe	Leu	His	Phe	Leu	Trp	Ala	Gly	Pro
			165					170					175		
Leu	Gln	Ala	Ile	Ala	Val	Thr	Ala	Leu	Leu	Trp	Met	Glu	Ile	Gly	Ile
			180					185					190		
Ser	Cys	Leu	Ala	Gly	Met	Ala	Val	Leu	Ile	Ile	Leu	Leu	Pro	Leu	Gln
		195					200					205			
Ser	Cys	Phe	Gly	Lys	Leu	Phe	Ser	Ser	Leu	Arg	Ser	Lys	Thr	Ala	Thr
		210				215					220				
Phe	Thr	Asp	Ala	Arg	Ile	Arg	Thr	Met	Asn	Glu	Val	Ile	Thr	Gly	Ile
	225					230					235			240	
Arg	Ile	Ile	Lys	Met	Tyr	Ala	Trp	Glu	Lys	Ser	Phe	Ser	Asn	Leu	Ile
			245					250					255		
Thr	Asn	Leu	Arg	Lys	Lys	Glu	Ile	Ser	Lys	Ile	Leu	Arg	Ser	Ser	Cys
		260					265					270			
Leu	Arg	Gly	Met	Asn	Leu	Ala	Ser	Phe	Phe	Ser	Ala	Ser	Lys	Ile	Ile
		275				280						285			
Val	Phe	Val	Thr	Phe	Thr	Thr	Tyr	Val	Leu	Leu	Gly	Ser	Val	Ile	Thr
	290					295					300				
Ala	Ser	Arg	Val	Phe	Val	Ala	Val	Thr	Leu	Tyr	Gly	Ala	Val	Arg	Leu
	305					310					315				320

Thr Val Thr Leu Phe Phe Pro Ser Ala Ile Glu Arg Val Ser Glu Ala
 325 330 335
 Ile Val Ser Ile Arg Arg Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile
 340 345 350
 Ser Gln Arg Asn Arg Gln Leu Pro Ser Asp Gly Lys Lys Met Val His
 355 360 365
 Val Gln Asp Phe Thr Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr
 370 375 380
 Leu Gln Gly Leu Ser Phe Thr Val Arg Pro Gly Glu Leu Leu Ala Val
 385 390 395 400
 Val Gly Pro Val Gly Ala Gly Lys Ser Ser Leu Leu Ser Ala Val Leu
 405 410 415
 Gly Glu Leu Ala Pro Ser His Gly Leu Val Ser Val His Gly Arg Ile
 420 425 430
 Ala Tyr Val Ser Gln Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser
 435 440 445
 Asn Ile Leu Phe Gly Lys Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val
 450 455 460
 Ile Lys Ala Cys Ala Leu Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly
 465 470 475 480
 Asp Leu Thr Val Ile Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln
 485 490 495
 Lys Ala Arg Val Asn Leu Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile
 500 505 510
 Tyr Leu Leu Asp Asp Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg
 515 520 525
 His Leu Phe Glu Leu Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr
 530 535 540
 Ile Leu Val Thr His Gln Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile
 545 550 555 560
 Leu Ile Leu Lys Asp Gly Lys Met Val Gln Lys Gly Thr Tyr Thr Glu
 565 570 575
 Phe Leu Lys Ser Gly Ile Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn
 580 585 590
 Glu Glu Ser Glu Gln Pro Pro Val Pro Gly Thr Pro Thr Leu Arg Asn
 595 600 605
 Arg Thr Phe Ser Glu Ser Ser Val Trp Ser Gln Gln Ser Ser Arg Pro
 610 615 620

Ser Leu Lys Asp Gly Ala Leu Glu Ser Gln Asp Thr Glu Asn Val Pro
 625 630 635 640
 Val Thr Leu Ser Glu Glu Asn Arg Ser Glu Gly Lys Val Gly Phe Gln
 645 650 655
 Ala Tyr Lys Asn Tyr Phe Arg Ala Gly Ala His Trp Ile Val Phe Ile
 660 665 670
 Phe Leu Ile Leu Leu Asn Thr Ala Ala Gln Val Ala Tyr Val Leu Gln
 675 680 685
 Asp Trp Trp Leu Ser Tyr Trp Ala Asn Lys Gln Ser Met Leu Asn Val
 690 695 700
 Thr Val Asn Gly Gly Gly Asn Val Thr Glu Lys Leu Asp Leu Asn Trp
 705 710 715 720
 Tyr Leu Gly Ile Tyr Ser Gly Leu Thr Val Ala Thr Val Leu Phe Gly
 725 730 735
 Ile Ala Arg Ser Leu Leu Val Phe Tyr Val Leu Val Asn Ser Ser Gln
 740 745 750
 Thr Leu His Asn Lys Met Phe Glu Ser Ile Leu Lys Ala Pro Val Leu
 755 760 765
 Phe Phe Asp Arg Asn Pro Ile Gly Arg Ile Leu Asn Arg Phe Ser Lys
 770 775 780
 Asp Ile Gly His Leu Asp Asp Leu Leu Pro Leu Thr Phe Leu Asp Phe
 785 790 795 800
 Ile Gln Thr Leu Leu Gln Val Val Gly Val Val Ser Val Ala Val Ala
 805 810 815
 Val Ile Pro Trp Ile Ala Ile Pro Leu Val Pro Leu Gly Ile Ile Phe
 820 825 830
 Ile Phe Leu Arg Arg Tyr Phe Leu Glu Thr Ser Arg Asp Val Lys Arg
 835 840 845
 Leu Glu Ser Thr Thr Arg Ser Pro Val Phe Ser His Leu Ser Ser Ser
 850 855 860
 Leu Gln Gly Leu Trp Thr Ile Arg Ala Tyr Lys Ala Glu Glu Arg Cys
 865 870 875 880
 Gln Glu Leu Phe Asp Ala His Gln Asp Leu His Ser Glu Ala Trp Phe
 885 890 895
 Leu Phe Leu Thr Thr Ser Arg Trp Phe Ala Val Arg Leu Asp Ala Ile
 900 905 910
 Cys Ala Met Phe Val Ile Ile Val Ala Phe Gly Ser Leu Ile Leu Ala
 915 920 925
 Lys Thr Leu Asp Ala Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu

<p>930</p> <p>Thr Leu Met Gly Met Phe Gln Trp Cys Val Arg Gln Ser Ala Glu Val 945</p> <p>Glu Asn Met Met Ile Ser Val Glu Arg Val Ile Glu Tyr Thr Asp Leu 965</p> <p>Glu Lys Glu Ala Pro Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp 980</p> <p>Pro His Glu Gly Val Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser 995</p> <p>Pro Gly Gly Pro Leu Val Leu Lys His Leu Thr Ala Leu Ile Lys Ser 1010</p> <p>Gln Glu Lys Val Gly Ile Val Glu Arg Thr Gly Ala Gly Lys Ser Ser 1025</p> <p>Leu Ile Ser Ala Leu Phe Arg Leu Ser Glu Pro Glu Gly Lys Ile Trp 1045</p> <p>Ile Asp Lys Ile Leu Thr Thr Glu Ile Gly Leu His Asp Leu Arg Lys 1060</p> <p>Lys Met Ser Ile Ile Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met 1075</p> <p>Arg Lys Asn Leu Asp Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp 1090</p> <p>Asn Ala Leu Gln Glu Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro 1105</p> <p>Gly Lys Met Asp Thr Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val 1125</p> <p>Gly Gln Arg Gln Leu Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn 1140</p> <p>Gln Ile Leu Ile Ile Asp Glu Ala Thr Ala Asn Val Asp Pro Arg Thr 1155</p> <p>Asp Glu Leu Ile Gln Lys Lys Ile Arg Glu Lys Phe Ala His Cys Thr 1170</p> <p>Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp Ser Asp Lys 1185</p> <p>Ile Met Val Leu Asp Ser Gly Arg Leu Lys Glu Tyr Asp Glu Pro Tyr 1205</p> <p>Val Leu Leu Gln Asn Lys Glu Ser Leu Phe Tyr Lys Met Val Gln Gln 1220</p> <p>Leu Gly Lys Ala Glu Ala Ala Leu Thr Glu Thr Ala Lys Gln Arg 1235</p>	<p>935</p> <p>950</p> <p>970</p> <p>985</p> <p>1000</p> <p>1015</p> <p>1030</p> <p>1050</p> <p>1065</p> <p>1080</p> <p>1095</p> <p>1110</p> <p>1130</p> <p>1145</p> <p>1160</p> <p>1175</p> <p>1190</p> <p>1210</p> <p>1225</p> <p>1240</p>	<p>940</p> <p>955</p> <p>975</p> <p>990</p> <p>1005</p> <p>1020</p> <p>1035</p> <p>1055</p> <p>1070</p> <p>1085</p> <p>1100</p> <p>1115</p> <p>1135</p> <p>1150</p> <p>1165</p> <p>1180</p> <p>1200</p> <p>1215</p> <p>1230</p> <p>1245</p>
--	---	---

Trp Gly Phe Thr Met Leu Ala Arg Leu Val Ser Asn Ser
1250 1255 1260

<210> 539
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 539
Cys Leu Ser His Ser Val Ala Val Val Thr
1 5 10

<210> 540
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 540
Ala Val Val Thr Ala Ser Ala Ala Leu
1 5

<210> 541
<211> 14
<212> PRT
<213> Homo sapiens

<400> 541
Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu
5 10

<210> 542
<211> 15
<212> PRT
<213> Homo sapiens

<400> 542
Thr Gln Val Val Phe Asp Lys Ser Asp Leu Ala Lys Tyr Ser Ala
5 10 15

<210> 543
<211> 12
<212> PRT
<213> Homo sapiens

<400> 543
Phe Met Gly Ser Ile Val Gln Leu Ser Gln Ser Val
5 10

```
<210> 544
<211> 18
<212> PRT
<213> Homo sapiens
```

<400> 544
Thr Tyr Val Pro Pro Leu Leu Leu Glu Val Gly Val Glu Glu Lys Phe
5 10 15

Met Thr

```
<210> 545
<211> 18
<212> PRT
<213> Homo sapiens
```

<400> 545
Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg Ala Val Tyr Leu Ala
5 10 15

Ser Val

```
<210> 546
<211> 29
<212> PRT
<213> Homo sapiens
```

<400> 546
Phe Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly
5 10 15

Thr Glu Ala Arg Arg His Tyr Asp Glu Gly Val Arg Met
20 25

```
<210> 547
<211> 58
<212> PRT
<213> Homo sapiens
```

<400> 547
Val Ala Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu
5 10 15

Ser Ala Pro Ser Leu Ser Pro His Cys Cys Pro Cys Arg Ala Arg Leu
20 25 30

Ala Phe Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Gln Leu Cys
35 40 45

Cys Arg Met Pro Arg Thr Leu Arg Arg Leu
50 55

200

<210> 548
<211> 18
<212> PRT
<213> Homo sapiens

<400> 548
Ile Asp Trp Asp Thr Ser Ala Leu Ala Pro Tyr Leu Gly Thr Gln Glu
5 10 15

Glu Cys

<210> 549
<211> 18
<212> PRT
<213> Homo sapiens

<400> 549
Leu Glu Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro Asp His Cys Arg
5 10 15

Gln Ala

<210> 550
<211> 14
<212> PRT
<213> Homo sapiens

<400> 550
Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Pro Phe
5 10

<210> 551
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 551
Phe Asp Lys Ser Asp Leu Ala Lys Tyr Ser Ala
5 10

<210> 552
<211> 2577
<212> DNA
<213> Homo sapiens

<400> 552
agcatatgta acatgacctg tgcttcagtg ttcttttgtg atcaaaaatt ccttactttt 60
agttttttat ctatggtaga accaccaga gcaggggtcc tcaactccca ggccacagac 120
tcataaccagt ccaaggacta ttatgaacca caccacacag gaggaggtga gcactaggca 180
agccaaggaa gcttcacctg tacttacagc cacacgcat gggtcatatt acagcctgaa 240

```

ctctgctcc actcagatca gtgataacat tagaaactca ttggagcacg aacctgtgtg 300
tgaactgcct atccgaagga tctaggtgt gtgcttcgta tggaactcta atgccagatg 360
atctatcatt gtctcacttt gcccccagat aagaccatct agttgcagaa aaataagctc 420
agagcttcca ctgattctac attatggata tgtgcccgcc aagcaagcac aaagccctac 480
ttttacacat gccatgtgat gcttcatgga caaggtcttg cctctgttag tccaactaac 540
ctacctgaga tttctgagatt tctcttcaat ggcttctctg gagctagagt ttgaaaatat 600
cttaaaatct tgagctagag atggaagtag ctgtgacgat ttctattatc atgtaaatcg 660
gggtcactca ggggccaacc acagctggga gccactgctc aggggaaggt tcatatggga 720
ctttctactg cccaaggttc tatacaggat ataaaggtgc ctccacagat agatctggta 780
gcaaaagaaga aaaaaaaac actgatctct ttctgccacc cctctgaccc ttggaactc 840
cctcgacctt ttagaacaag cctacctaat atctgtcaga gaaaagacca acaacggcct 900
caaaggatct ctaccatga aggtctcagc taattcttgg ctaagatgtg ggttccacat 960
taggttctga atatgggggg aagggccaat tgtctcatt tgtgtgtgga taaagtcagg 1020
atgccacagg gccagagcag ggggctgtcg ctlttggaac aatggctgag catataacca 1080
taggtatggg acaaaaaaac atcaaaagtc ctgtatcaat tgccatgaag actcgaggga 1140
cctgaatcta ccgattcatc ttaaggcagc aggaccagtt tgagtggcaa caatcgagca 1200
gcagaatcaa tggaaacaac agaattgatt caatgtcctt tttttctctc tctctctgac 1260
ttgataaagg gggacgtctt ccttggattt agtgaacccc ttgtgttctt gaaaaatca 1320
aggatattct aggacatagt cccagaaga cagtacaaga ctttctgata aactgcagac 1380
tccaagcccc aaataactaa tcagaaaaat caaagatgtg atactatttt tbatcccatg 1440
cataggtctc acacttggat caaatgaaca atgttgggat ctytatggat aaagctctta 1500
aaagtctctg gataaagaat cctgcaccca ctggtacttc taacttgtct tgtttttgt 1560
ctgttttctg gctgatgcag gggactaaat cactgccacg cgaaaactac ctgaactgaa 1620
ctatgacatc tcacctgata tgtaagatgt aactgttata attattttaa acctcaattt 1680
agcattaact agcttttaa tgtaaacact tacacattat gaygactaga aacagcatc 1740
tctctggcgc tctgtccaga tagatcttga gaagatacat caatgttttg ctcaagtaga 1800
aggctgacta tacttgcgca tccacaacat acagcaagta tgagagcagt tctaaaaatg 1860
cagagatagg aacagttaata aagttattkt aaaaagtaat ttgatatact ttaccaattt 1920
aacatcttgc ctgtccgtgc agaatacaac atttaccatgc actaaaagac ataagcatct 1980
tcagtgtcca agtgttcatc tttgtaaaat accccaagg ttaaaaggaa gggacaaaaa 2040
aaaaaaaccc tcttatctca gtggggtatt gcatagcaga agctactaat ttgaagtctt 2100
ttgatggaca agaacaata ttagggccac ttatctgaaa tgacaaaaga ttaagttaa 2160
gatttcaaga cagcttccct agactgatat gctgtaaatg aaaaatcagct agggggtaaa 2220
ataaataaga gctctctgca tgcgtgaaagc aagtaagatt aataataatg gtaagaatag 2280
tagtcacagg agtttccagt aatgatgccca ataagcatgt gctaggacat gaattaaatg 2340
ccacatatac atttcttatg cgcagcaaac ttggaaggt atattctcct acttttctat 2400
tatgacaaca tatttggtag taaataacgt tcccaaggtc acacacctag caagtaagaa 2460
agttaggaaat taaacccagt attgtgtgaa tctaagcgtt aacttttttc tctttttcac 2520
ccacctacgg cttgtcttca ttaaggaaa agtgtatcca cttaaaaaaa aaaaaa 2577

```

<210> 553

<211> 58

<212> PRT

<213> Homo sapiens

<400> 553

```

Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
          5                      10                      15

```

```

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
          20                      25                      30

```

```

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
          35                      40                      45

```

```

Glu Pro His His Thr Gly Gly Gly Glu His
          50                      55

```



```
<210> 554
<211> 59
<212> PRT
<213> Homo sapiens
```

```

<400> 554
Leu Gln Lys Asn Lys Leu Arg Ala Ser Thr Asp Ser Thr Leu Trp Ile
      5              10              15
Cys Ala Ala Glu Ala Ser Thr Lys Pro Tyr Phe Tyr Thr Cys Leu Val
      20              25              30
Met Leu His Gly Gln Gly Leu Ala Leu Leu Ser Pro Thr Asn Leu Pro
      35              40              45
Glu Ile Leu Arg Phe Leu Phe Asn Gly Phe Leu
      50              55

```

```
<210> 555
<211> 71
<212> PRT
<213> Homo sapiens
```

```

<400> 555
Leu Gly Arg Phe Ser Leu Ser Cys Lys Ser Gly His Ser Arg Gly Gln
      5              10              15
Pro Gln Leu Gly Ala Thr Ala Gln Gly Lys Val His Met Gly Leu Ser
      20              25              30
Thr Ala Gln Gly Ser Ile Gln Asp Ile Lys Val Pro His Ser Ile Asp
      35              40              45
Leu Val Ala Lys Lys Lys Lys Gln Thr Leu Ile Ser Phe Cys His Pro
      50              55              60
Ser Asp Pro Leu Glu Leu Leu
      65              70

```

```
<210> 556
<211> 81
<212> PRT
<213> Homo sapiens
```

```

<400> 556
Asn His Pro Glu Gln Gly Ser Ser Thr Pro Arg Pro Gln Thr His Thr
      5              10              15

Ser Pro Arg Thr Ile Met Asn His Thr Thr Gln Glu Glu Val Ser Thr
      20              25              30

Arg Gln Ala Lys Glu Ala Ser Pro Val Leu Thr Ala Thr Arg His Gly
      35              40              45

Ser Tyr Tyr Ser Leu Asn Ser Ala Ser Thr Gln Ile Ser Asp Asn Ile

```

50					55					60					
Arg	Asn	Ser	Leu	Glu	His	Glu	Pro	Cys	Cys	Glu	Leu	Pro	Ile	Arg	Arg
65					70					75					80

Ile

```
<210> 557
<211> 54
<212> PRT
<213> Homo sapiens
```

<400> 557
Ser Leu Ser Ala Thr Pro Leu Thr Leu Trp Asn Ser Ser Asp Pro Leu
5 10 15

Glu Gln Ala Tyr Leu Ile Ser Ala Arg Glu Lys Thr Asn Asn Gly Leu
20 25 30

Lys Gly Ser Leu Thr Met Lys Val Ser Ala Asn Ser Trp Leu Arg Cys
35 40 45

Gly Phe His Ile Arg Phe
50

```
<210> 558
<211> 77
<212> PRT
<213> Homo sapiens
```

```
<220>  
<221> VARIANT  
<222> (1)...(77)  
<223> Xaa = Any amino acid
```

<400> 558
Asn Asp Arg Asp Arg Asn Ser Asn Lys Val Ile Xaa Lys Ala Asn Leu
5 10 15

Ile Tyr Phe Thr Asn Leu Thr Ser Cys Leu Ser Val Gln Asn Gln Thr
20 25 30

Phe Thr Cys Thr Lys Arg His Lys His Leu Gln Cys Ser Ser Val His
35 40 45

Leu Cys Lys Ile Pro Pro Arg Leu Lys Gly Arg Asp Lys Lys Lys Lys
50 55 60

Pro Ser Tyr Leu Ser Gly Val Leu His Ser Arg Ser Tyr
65 70 75

```
<210> 559
<211> 50
<212> PRT
```

<213> Homo sapiens

<400> 559

Thr Leu Pro Pro Leu Arg Ser Val Ile Thr Leu Glu Thr His Trp Ser
5 10 15

Thr Asn Pro Val Val, Asn Cys Leu Ser Glu Gly Ser Arg Leu Cys Ala
20 25 30

Ser Tyr Glu Asn Leu Met Pro Asp Asp Leu Ser Leu Ser His Phe Ala
35 40 45

Pro Arg
50

<210> 560

<211> 56

<212> PRT

<213> Homo sapiens

<400> 560

Ile Gly Ser Leu Lys Gly Pro Thr Thr Ala Gly Ser His Cys Ser Gly
5 10 15

Glu Gly Ser Tyr Gly Thr Phe Tyr Cys Pro Arg Phe Tyr Thr Gly Tyr
20 25 30

Lys Gly Ala Ser Gln Tyr Arg Ser Gly Ser Lys Glu Glu Glu Thr Asn
35 40 45

Thr Asp Leu Phe Leu Pro Pro Leu
50 55

<210> 561

<211> 57

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> (1) . . . (57)

<223> Xaa = Any amino acid

<400> 561

Val Leu His Leu Asp Gln Met Asn Asn Val Gly Ile Xaa Met Asp Lys
5 10 15

Gly Leu Lys Ser Pro Glu Ile Lys Asn Pro Ala Pro Thr Gly Thr Ser
20 25 30

Asn Leu Ser Cys Phe Leu Ser Xaa Phe Trp Leu Met Gln Gly Thr Asn
35 40 45

Ser Leu Pro Arg Glu Asn Tyr Leu Asn
50 55

```
<210> 562
<211> 59
<212> PRT
<213> Homo sapiens
```

```
<220>  
<221> VARIANT  
<222> (1)...(59)  
<223> Xaa = Any amino acid
```

```

<400> 562
Asp Leu Tyr  Pro Xaa Arg Ser Gln His Cys Ser Phe Asp Pro Ser Val
              5              10              15
Ala Pro Met  His Gly Ile Lys Asn Ser Ile Thr Ser Leu Ile Phe Leu
              20              25              30
Ile Ser Tyr   Leu Xaa Leu Glu Met Ser Ser Leu Ser Glu Ser Leu Val
              35              40              45
Leu Ser Ser Gly Asp Tyr Val  Leu Asp Thr Pro
              50              55

```

```
<210> 563
<211> 79
<212> PRT
<213> Homo sapiens
```

```

<400> 563
Cys Phe Leu Phe Pro Tyr Leu Trp Leu Tyr Ala Gln Pro Leu Phe Pro
          5              10              15
Lys Gln Gln Pro Pro Ala Leu Ala Pro Gly His Pro Asp Phe Ile His
          20              25              30
Thr Gln Asn Glu Gln Ile Asp Pro Ser Pro His Ile Gln Asn Leu Met
          35              40              45
Trp Asn Pro His Leu Ser Gln Glu Leu Ala Glu Thr Phe Met Val Arg
          50              55              60
Asp Pro Leu Arg Pro Leu Leu Val Phe Ser Leu Ala Asp Ile Arg
          65              70              75

```

```
<210> 564
<211> 64
<212> PRT
<213> Homo sapiens
```

<400> 564
Ala Cys Ser Lys Gly Ser Glu Glu Phe Gln Arg Val Arg Gly Val Ala
 5 10 15
Glu Arg Asp Gln Cys Leu Phe Leu Leu Cys Tyr Gln Ile Tyr Thr
 20 25 30

Val Arg His Leu Tyr Ile Leu Tyr Arg Thr Leu Gly Ser Arg Lys Ser
35 40 45

His Met Asn Leu Pro Leu Ser Ser Gly Ser Gln Leu Trp Leu Ala Pro
50 55 60

<210> 565

<211> 57

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> (1)...(57)

<223> Xaa = Any amino acid

<400> 565

Leu Tyr Tyr Cys Ser Tyr Leu Cys His Phe Arg Thr Ala Leu Ile Leu
5 10 15

Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln
20 25 30

Asn Ile Asp Val Ser Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu
35 40 45

Tyr Ala Val Ser Ser Xaa His Asn Val
50 55

<210> 566

<211> 55

<212> PRT

<213> Homo sapiens

<400> 566

Ile Leu Leu Glu Phe Phe Arg Asn Gln Arg Gly Ser Leu Asn Pro Arg
5 10 15

Lys Thr Val Pro Phe Ile Lys Ser Glu Gly Glu Lys Lys Gly His
20 25 30

Cys Asn His Ser Val Val Ser Ile Asp Ser Ala Ala Ala Leu Leu Pro
35 40 45

Leu Lys Leu Val Leu Leu Pro
50 55

<210> 567

<211> 51

<212> PRT

<213> Homo sapiens

<400> 567

Tyr Ser Asp Phe Asp Val Phe Cys Ser His Thr Tyr Tyr Met Leu

207

5 10 15
 Ser His Cys Ser Gln Ser Ser Ser Pro Leu Leu Trp Pro Leu Gly Ile
 20 25 30
 Leu Thr Leu Ser Thr His Lys Met Ser Lys Leu Thr Leu Pro Pro Ile
 35 40 45
 Phe Arg Thr
 50

<210> 568

<211> 75

<212> PRT

<213> Homo sapiens

<400> 568

Lys Val Gly Glu Tyr Ile Leu Gln Ser Leu Leu Arg Ile Arg Lys Ile
 5 10 15

Tyr Val Ala Phe Asn Ser Val Pro Ser Thr Cys Leu Leu Ala Ser Leu
 20 25 30

Thr Glu Thr Pro Val Thr Thr Ile Leu Thr Ile Ile Ile Asn Leu Thr
 35 40 45

Cys Phe Gln His Ala Glu Ser Ser Tyr Leu Phe Tyr Pro Leu Ala Asp
 50 55 60

Phe Leu Leu Gln His Ile Ser Leu Gly Lys Leu
 65 70 75

<210> 569

<211> 4809

<212> DNA

<213> Homo sapiens

<400> 569

gcatccagag tgggtggactg gttacaggct atgaacctac actgatgcgg caccaccacc 60
 cagagtcacac rgggttatggt ggttcacatt tactcttgct gtgggtatggt ctatagggtt 120
 ggacagatgt ccgataatcc tttttacatt ttggcatcct tgggttagctc gtctttagtg 180
 aatggacttg cttcaaatg gaggcaggca gatccttcag acgggtatat ggagccctgt 240
 ttccagtgtc ttttctaatt ctctcttacc gtttacctca aaatcttctc gaggtctcgc 300
 ttccctttta aatccttgtc tactttgcag catcactctg acactcccat tgattcctca 360
 gcacctactg actacacggg taggagtgc aaggtagaat tcatgtttta ttoacttttg 420
 ggtctgtagc accacgcaaa gtgctcagta aatgcgcagt aattgatttg acctctgaac 480
 aaatcacacac tgtactaaga atctacacac cgaagaacaa aaacaagaca aatttgagtg 540
 ctacagggtg cactgttggc atcacacatg tgccctgtga ttctcttagg tggttaccag 600
 gagctctgac actgcatgtc cactagtac ggggttcgtc caccaccaca gctgggttagc 660
 cgtgctctcc acataagggg tccaattaaa attgccagga ataaattccc ccggactttg 720
 acttctcaag agctaagaag gtttgctgag tattctggca tgatgtttgg tgatcaacaa 780
 actgctggcc aaaaatgatg agtatttccc cctcttgctg aagatgtgct ccatacaata 840
 gtccatcaca ttcatcattc atcagctctg aagtggtcag aacaacatgt aatagataat 900
 atgatggctg gcacacttcc agactgatga atgatgaatg tgatggacta ttgatgtgag 960
 cacatcttca gcaagagggg gaaatactca tcattttacc tattacatgt tggttctgggt 1020

ttttttttt	tccaatgtcc	agcctaaact	ataaagtact	ttgagaagcgc	acagtgagcc	1080
ataagcttgc	caataaagag	tcctctgtgg	tatggaactg	gcttatttca	tacacaactc	1140
gcacaaactg	agggcactat	tggaaacata	ctgtgctgca	cagagcattt	acacgccta	1200
tccttaactc	tcocccagcaa	tcctctgttt	gtgcgcattt	atgatccttg	ctctcagaag	1260
tcacacatac	tttcccacac	cgtatacaat	tatttaactc	atctaagtta	tgtatgtccg	1320
cgcagctctga	aaacagtgat	tgctcctggg	aagaagtgag	ttaagagag	ctctcaggca	1380
ctcatcacaa	ctccagccct	gccctccatg	tgttagcagc	tcctttgagt	ggggctaaat	1440
gcttattctt	gtgcttcatt	cctggtaagc	tcaatttctt	tacotttaga	taactttgct	1500
ggaaaagggc	tcagattcag	ccgaccattg	tggcctctgt	ggctgtcaca	gcttgcctct	1560
gacatgctat	gatgttgggt	ccocttctca	tcctcctggg	atttctctgt	ctgtgcccaca	1620
gccagacaaa	ctaggccctt	tactccacca	tccttttgtt	ttcttttgtt	tcgttggtaa	1680
aaatcaactc	ttctacocat	catgcatagc	aatttctaaa	aactgaattt	caagagcagt	1740
atctgaagaa	acaaacatga	tttgctcctt	ttagtaaaaa	gaataaattt	taataaacta	1800
acotttgaat	agttgttaaga	gttaagaaaa	agcacaaaa	tgagatcatc	agagcagcct	1860
ggcctcaaat	gcagggcagc	aggattctac	agggtttgag	ccttctaag	tgaagtgcct	1920
tcctgcagcg	tcctcgtccc	aagctcctag	ctaacagccc	cttctccacc	tgttggcaga	1980
aaagagcaaa	ataaactttg	tacttgatgc	tgagtcaagt	taaaagccca	taaaaatttc	2040
cctctaagt	ctaaaaatgtt	tgctcctctt	gaggctctct	tcctcctaact	gggtctggat	2100
aaattagcac	tgggcttata	ttgagtcaaa	gatctgggcc	ctgccacaga	gagcttccct	2160
ctagtgtgtg	atgctttttc	tccaaactat	tgatacaaaa	tgacatggaa	tagaatacaa	2220
cagaaaactgc	tcaaaagtgt	ggcatacaca	ttctcatgta	gatgtaaagc	ctgtcttaga	2280
attcctttgt	ggagctgtgt	ttgtgtcttg	ttttcttgtt	gtttgattca	tttttttaag	2340
taaatatcaa	aaacctccca	catttcttca	tggattgtat	tagtccatgt	ttctccagaga	2400
agcagaaacga	gttgatgtga	tgttttggaa	gagattatga	ggaaccggct	catgtgtatga	2460
aggaagttga	gaggtcctgt	gctctgccat	ctgcaagctg	aagaactcga	aaagctgaggg	2520
tgtgtgtcca	gtctgatgct	gaaggcccaa	gaaccagggg	aaaccaacgt	gtagatccca	2580
ggttgaagcg	aggagaagat	ggatgtccca	gctgcacagc	caggcagggaa	gcaaatgggg	2640
taaatctccc	cttctccacc	cttttgttcc	attcagccct	tcacacagat	ggatgagcct	2700
ccccccacc	ccacactagg	gagggccatc	tgtcttaactg	agtcggctga	gtcaacgtgcc	2760
agcctcatcc	caaaaactc	tcacagacaca	cgcagaaatg	ttcatctcga	gccacctgtg	2820
gccagtcagt	ctgacacaca	gaactaaacca	tgacatggat	ttctcttaaa	gcagtgtatg	2880
gagcgaaacg	aaacattttc	ataattttca	attattttta	atgaaaaacta	tatctgtatg	2940
aattgtttaa	acotagtctg	gccacacatt	atttccctggg	accgcccctc	cttcaatccc	3000
ttggacactg	atgactttat	gccacagatta	cactggagcg	ctgtgctgat	tttctaaccac	3060
atacctgcaa	ctgagctggc	aaaaagaaaa	ctaggcaagt	atgacagata	cactgatgcc	3120
aggtctaagt	caaaaggaaa	aaaaaacacca	actgcagggg	tgaaggactc	acccttttag	3180
aagtttctac	ttgagcagct	agaagactac	aatgccactc	atcaaaaacg	tgactcaggg	3240
ggagtatttg	ggataaaagg	ggaatctgat	gttggaggct	aaatttgaag	gtcttttaag	3300
acctacaggt	acagagacag	ctggacaaac	acatggaact	caggacaaag	gctctaagga	3360
cagcacagca	gctgacatcc	tgtgtgacag	ccttgaaaag	agcaggcccg	ccgctcacat	3420
tttggaaagg	aaaaatgggt	caatgttgtc	tgccactttg	gggccttctt	gggtcacagt	3480
cattttacct	tatgcagagt	gatataatta	tgtttcctgg	gtcttttata	cattagacac	3540
catgattctc	taactcttgt	tattttgtat	tacaaaaagc	tgaattatta	tttcaaatat	3600
gggcaaatat	gagccttcca	tattgccaag	gtgtatcaac	caactgata	ycayagatctc	3660
tcctttgaa	tagttttcca	gttcaacact	accatttatt	tcagtattgg	tttcagactct	3720
gttccctctg	gaacacctcc	ctaaacagca	ccttgcaggg	aatgaagaca	caccacacac	3780
atctacccca	tactgcagt	tactcaagag	ctagctttta	tatgatctct	cccaagtgtc	3840
ccataatggc	ggatctttca	ctcacctcaa	agtggagaca	aaatacttga	aagcatgagc	3900
cagtgctcgt	taggtgtgca	attaaactca	gaccaaggaa	gtgcgaagc	catctggctt	3960
ttagcaaggc	acctgacaaa	gtccttcagg	atgtttttgt	acatgagcta	gagaaatgta	4020
cctggagaac	gcttctact	gccagatgat	cttactcaaa	agatgcagat	taagcagaagt	4080
atcaacccaa	aggtgtgtcc	ctgatggccc	accagccctc	gtgcttggct	cgtttcctat	4140
gtttcctaga	tttggtttca	gaottgtctc	tcctgcagac	actccctaac	cagcatcctt	4200
gcagaaaact	ggtgaactag	aaaaggcctg	tgtgggtcac	gtggccaccc	aaacaccacg	4260
cagtgctcaa	ggtatcgogt	ggagcctgca	cagcaggagc	ggggtcttct	ggagaccgcg	4320
atgagatgta	aaagggcagt	gaacaggagc	caagggaggt	ctctctagtc	acgtctggat	4380
ggtgccagct	tgaggatgct	gggcaagtcc	cgagccgctc	gccttctcag	taccaacagt	4440
accactgctc	gttactcgcg	gagttcaagt	gcttccagtg	agacagctac	gagcagggcc	4500

```

cctggaacct ggaaaatgcy aagtaaatgt catgcacaat tgttggtcac attttatctc 4560
aatcaactttt accaaatcag gctaaaccct gggtattcat aacgtcttgg gctgtacaaa 4620
ttgttccctgg aatagactca gagacatttt ctgaattggc ttccatcagc caagcatttc 4680
ttcagaactgg gaaaaatgct ttaaatgttg ctttgcctatg attattaaaa cactctgtac 4740
attttttatt attgaaatta acacattggc tactttttaa aaattgaaaa aagaaaaaaa 4800
aaaaaaaaaa

```

<210> 570
 <211> 951
 <212> DNA
 <213> Homo sapiens

```

<400> 570
aaaattgaat attgagatac cattcttttag tgttaccttt ttaccacaca tgtgtttctg 60
aaaatatatgg aattttattc atcttaaaaa ttggaccogg ccttatttac catctttaat 120
ccatttttagt actatgggtg agtacatgga attgaagtct ggcttaaatc ttcagaaagt 180
tatatactcta ttttatttta tttttttgag acagagtctc gctgtgtcac ccaggctgga 240
gtgcgtgtgcc acaactcttg ctcaactgcaa cctctgagtc ccagggttcaa gcgataactca 300
tgccctcgccc tctctgagtag ctgggactac aggcgtgcac caccacatct ggctaactctt 360
tttttctatt ttttagtagag acgggggttc actgtgtgct ccatctcctg acctcgtgat 420
cgccctcgctt cccaaaatgct tgggattaca ggcattgagcc accgcacaca gctgggagct 480
ggtaatttat aaagaaaaga ggtttaatga ctacaggttc cgcattggctg gagaggcctc 540
aggaaactta caatcatggt ggaaggcgaa ggggaagcaa ggcacgtctt acatggtggc 600
aggagagaac gagttagggg ggagactgcc acaaaccttt tttttttgag acaagagctc 660
ggccctgttg cccaggctgg agtgacatgg catgatctca gctcactgca acctctgctc 720
cacagggttca agcaattctc atgctcagc ctccgcata gctgggacca caggatgca 780
ccaccacacc tagctaattt ttgtagtttt agtagagatg gggctctcat atgtgtctca 840
ggctgtgtcta aaactcctgg gctccagcaa tccgctgccc ttggcctccc aaagtctgctg 900
ggttacaggc ataagccacc acatccagcc tgccacatac ttttaacta t 951

```

<210> 571
 <211> 819
 <212> DNA
 <213> Homo sapiens

```

<400> 571
cagcttaaaa atggtttctt gaaatcagtg attagcattc actcaccagt acccctaacta 60
aggggttaggc actggtttgt actcctggga atacaggagt acaccagaat ttattctctg 120
ttattgcttt tgggtcaaat gcgctggctt catctgagga attctagaat tcagagggtg 180
tagccctcca ctctgctgtc ttgctatctg ctctcattgc atccgtttaa cctgcaattct 240
gaaagatggt tctcaggttt ttcttgaagc attttctctc ttcttgattc tgcaatggtt 300
ttaaatcatt gtactgtggt tatcattctc ctgcatttat ttaccacatc ttcttttgta 360
actgtctcta tttcttttta attctcgctt gttctttatg gctttcaact tcataaataa 420
catgttttct caaatctctt tgtgaattcc agagagggcc aggcacgggt gctcacatct 480
gtaatccacc cactttgggg aggcgtgagc ggggtgatca cttgaggtca ggagtttgag 540
accagcctgg ccaacatggt gaaatccctt ttcaactaaa atacaataat taaccaggca 600
tggtggcggg cgctctgtaat cccaggtact cgggaggtcg agggaggaga atcgcttgaa 660
cctgggaggg tgaggaggga gaatcgcttg aaccoggagg gcagagggtg cagtgaaccg 720
agatcatgtt gctgcactcc agcctggttc acagagcaag actctgcctc aaaaaaacaa 780
aaataaacaa acaaacaaac aaaaacagaga gattttgct 819

```

<210> 572
 <211> 203
 <212> DNA
 <213> Homo sapiens

```

<400> 572
tatagaatct tcaagctatg catcaagctt ggtaccgagc tcggatccac tatttacggc 60

```


cgccagtggtg ctggaattcg cccttagctc ggaaccacta gtccagtggtg gtggaattcc 120
 attgtgttgg gcccaacaca atggagccac cacatccagc ctgccacata cttttaaac 180
 atcaggtctc atgagaactc atg 203

<210> 573
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 573
 Met Val Glu Gly Glu Gly Glu Ala Arg His Val Leu His Gly Gly Arg
 5 10 15
 Arg Glu Arg Val Arg Gly Glu Thr Ala Thr Asn Phe Phe Phe Leu Arg
 20 25 30
 Gln Glu Ser Gly Pro Val Ala Gln Ala Gly Val Gln Trp His Asp Leu
 35 40 45
 Ser Ser Leu Gln Pro Leu Pro His Arg Phe Lys Gln Phe Ser Cys Leu
 50 55 60
 Ser Leu Pro His Ser Trp Asp His Arg Tyr Ala Pro Pro His Leu Ala
 65 70 75 80
 Asn Phe Cys Ser Phe Ser Arg Asp Gly Val Ser Leu Cys Cys Ser Gly
 85 90 95
 Trp Ser Lys Thr Pro Gly Leu Gln Gln Ser Ala Cys Leu Gly Leu Pro
 100 105 110
 Lys Cys Trp Gly Tyr Arg His Lys Pro Pro His Pro Ala Cys His Ile
 115 120 125
 Leu Leu Asn Tyr
 130

<210> 574
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 574
 Met Thr His Ser Ser Ala Trp Leu Glu Arg Pro Gln Glu Thr Tyr Asn
 5 10 15
 His Gly Gly Arg Arg Arg Gly Ser Lys Ala Arg Leu Thr Trp Trp Gln
 20 25 30
 Glu Arg Thr Ser Glu Gly Gly Asp Cys His Lys Leu Phe Phe Phe Glu
 35 40 45
 Thr Arg Val Trp Pro Cys Cys Pro Gly Trp Ser Ala Val Ala
 50 55 60

<210> 575

20	25	30
Pro Ala Pro Val Pro Gly Ser Phe Pro Met Phe Pro Arg Phe Gly Phe		
35	40	45
Arg Leu Ala Pro Pro Ala Asp Thr Pro		
50	55	

<210> 578
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 578
Met Gln Leu Ile Tyr Leu Cys Phe Leu Gly Leu Leu Tyr Ile Arg His
5 10 15
His Asp Ser Gln Ser Phe Val Ile Leu Tyr Tyr Lys Lys Leu Asn Tyr
20 25 30
Tyr Phe Lys Tyr Gly Gln Ile Arg Ala Phe His Ile Ala Lys Val Tyr
35 40 45
Gln Pro His
50

<210> 579
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 579
Met His Phe Thr Phe Met Gln Leu Ile Tyr Leu Cys Phe Leu Gly Leu
5 10 15
Leu Tyr Ile Arg His His Asp Ser Gln Ser Phe Val Ile Leu Tyr Tyr
20 25 30
Lys Lys Leu Asn Tyr Tyr Phe Lys Tyr Gly Gln Ile Arg Ala Phe His
35 40 45
Ile Ala Lys Val Tyr Gln Pro His
50 55

<210> 580
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 580
Met Glu Leu Arg Thr Lys Ala Leu Arg Thr Ala Gln Gln Leu Thr Ser
5 10 15
Cys Val Thr Ala Leu Lys Ala Ala Gly Pro Leu Thr Phe Trp Lys
20 25 30

Gly Lys Trp Val Gln Cys Cys Leu Pro Leu Trp Gly Leu Leu Gly Ser
 35 40 45

His Ala Phe Tyr Ile Tyr Ala Val Asp Ile Phe Met Phe Pro Gly Ser
 50 55 60

Phe Ile His
 65

<210> 581

<211> 77

<212> PRT

<213> Homo sapiens

<400> 581

Met Leu Glu Val Lys Phe Glu Val Ser Leu Arg Pro Thr Gly Asn Glu
 5 10 15

Thr Ala Gly Gln Thr His Gly Thr Gln Asp Lys Gly Ser Lys Asp Ser
 20 25 30

Thr Ala Ala Asp Ile Leu Cys Asp Ser Leu Glu Ser Ser Arg Pro Ala
 35 40 45

Ala His Ile Leu Glu Gly Lys Met Gly Thr Met Leu Ser Ala Thr Leu
 50 55 60

Gly Pro Ser Trp Val Thr Cys Ile Leu His Leu Cys Ser
 65 70 75

<210> 582

<211> 51

<212> PRT

<213> Homo sapiens

<400> 582

Met Leu Phe Leu Gln Thr Ile Asp Thr Lys Cys Thr Gly Ile Glu Ile
 5 10 15

Asn Arg Asn Trp Ser Lys Val Trp His Thr His Ser His Val Asp Val
 20 25 30

Lys Leu Cys Leu Glu Phe Leu Cys Gly Val Trp Phe Gly Leu Gly Phe
 35 40 45

Leu Gly Val
 50

<210> 583

<211> 60

<212> PRT

<213> Homo sapiens

<400> 583

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
50 55 60

<210> 584

<211> 76

<212> PRT

<213> Homo sapiens

<400> 584

Met Cys Leu Cys Ile Pro Leu Gly Gly Tyr Gln Glu Leu Cys His Cys
5 10 15

Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg
20 25 30

Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro
35 40 45

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly
50 55 60

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
65 70 75

<210> 585

<211> 50

<212> PRT

<213> Homo sapiens

<400> 585

Met Val Tyr Arg Phe Gly Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu
5 10 15

Ala Ser Leu Gly Ser Ser Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp
20 25 30

Arg Gln Ala Asp Pro Ser Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu
35 40 45

Leu . Phe
50

<210> 586

<211> 60

<212> PRT

<213> Homo sapiens

[illegible]

<400> 588
Met Pro Gln Lys Gln Gln Asn Ser Gln Thr Glu Ala Lys Tyr Arg Ala
5 10 15
Leu Gln Phe Arg Gln Tyr Asn Lys Ser Val His Glu Val Asn Leu Lys
20 25 30

Gly Ala Cys Phe Thr Val Ala Gly Leu Pro Arg Ala Trp Thr Thr Gln
 35 40 45
 Tyr Ser Ile Ile Asp Lys Arg Ile Arg Gln Glu Ile Tyr Thr Cys Cys
 50 55 60
 Leu Ala Phe Val Val Ile Tyr Thr Asn Glu Asn Met Tyr Tyr Ser Tyr
 65 70 75 80
 Ile

<210> 589
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 589
 Met Thr Met Cys Leu Cys Val Ala Pro Met Gly Arg Ala Thr Arg Met
 5 10 15
 Ser Val Thr Cys Asp Arg Leu His Ala Asn Ser Arg Val Arg Tyr Leu
 20 25 30
 Trp Cys Gln Lys Asp His Val Pro Gln Met Gln Asp Gln Asp Leu Glu
 35 40 45
 Met Glu Ser Met Lys Ala Leu Glu Lys Leu Val Lys Arg Arg His Pro
 50 55 60
 Pro Val Ile Phe Ala Ser Leu Val Gln Asn Val Thr Lys Met Pro Arg
 65 70 75 80
 Met Ser Gly Val Cys Val Ile Leu Thr Val Leu Lys Pro Thr Ser Ile
 85 90 95
 Pro Ser Ala Leu Leu Met Gly Asn Leu Met Ile Met His Ala Lys Ser
 100 105 110
 Lys Lys His Arg Val Arg Asn Arg Arg Lys Leu Lys Ser Cys Leu Trp
 115 120 125
 Val Asp Val Lys Ile Thr Gln Leu Leu Leu Ser Leu Lys Met Gly
 130 135 140
 Ile Met Gln Glu Gln Ile Met Gln Arg Met Leu Thr Asn
 145 150 155

<210> 590
 <211> 347
 <212> PRT
 <213> Homo sapiens

<400> 590
 Met Leu Leu Ile Val Ala Arg Pro Val Lys Leu Ala Ala Phe Pro Thr
 5 10 15

Ser Leu Ser Asp Cys Gln Thr Pro Thr Gly Trp Asn Cys Ser Gly Tyr
 20 25 30
 Asp Asp Arg Glu Asn Asp Leu Phe Leu Cys Asp Thr Asn Thr Cys Lys
 35 40 45
 Phe Asp Gly Glu Cys Leu Arg Ile Gly Asp Thr Val Thr Cys Val Cys
 50 55 60
 Gln Phe Lys Cys Asn Asn Asp Tyr Val Pro Val Cys Gly Ser Asn Gly
 65 70 75 80
 Glu Ser Tyr Gln Asn Glu Cys Tyr Leu Arg Gln Ala Ala Cys Lys Gln
 85 90 95
 Gln Ser Glu Ile Leu Val Val Ser Glu Gly Ser Cys Ala Thr Asp Ala
 100 105 110
 Gly Ser Gly Ser Gly Asp Gly Val His Glu Gly Ser Gly Glu Thr Ser
 115 120 125
 Gln Lys Glu Thr Ser Thr Cys Asp Ile Cys Gln Phe Gly Ala Glu Cys
 130 135 140
 Asp Glu Asp Ala Glu Asp Val Trp Cys Val Cys Asn Ile Asp Cys Ser
 145 150 155 160
 Gln Thr Asn Phe Asn Pro Leu Cys Ala Ser Asp Gly Lys Ser Tyr Asp
 165 170 175
 Asn Ala Cys Gln Ile Lys Glu Ala Ser Cys Gln Lys Gln Glu Lys Ile
 180 185 190
 Glu Val Met Ser Leu Gly Arg Cys Gln Asp Asn Thr Thr Thr Thr Thr
 195 200 205
 Lys Ser Glu Asp Gly His Tyr Ala Arg Thr Asp Tyr Ala Glu Asn Ala
 210 215 220
 Asn Lys Leu Glu Glu Ser Ala Arg Glu His His Ile Pro Cys Pro Glu
 225 230 235 240
 His Tyr Asn Gly Phe Cys Met His Gly Lys Cys Glu His Ser Ile Asn
 245 250 255
 Met Gln Glu Pro Ser Cys Arg Cys Asp Ala Gly Tyr Thr Gly Gln His
 260 265 270
 Cys Glu Lys Lys Asp Tyr Ser Val Leu Tyr Val Val Pro Gly Pro Val
 275 280 285
 Arg Phe Gln Tyr Val Leu Ile Ala Ala Val Ile Gly Thr Ile Gln Ile
 290 295 300
 Ala Val Ile Cys Val Val Val Leu Cys Ile Thr Arg Lys Cys Pro Arg
 305 310 315 320

Ser Asn Arg Ile His Arg Gln Lys Gln Asn Thr Gly His Tyr Ser Ser
325 330 335

Asp Asn Thr Thr Arg Ala Ser Thr Arg Leu Ile
340 345

<210> 591
<211> 565
<212> DNA
<213> Homo sapien

<400> 591
actaaagcaa atgaacaagc tgacttgcta gtatcatctg cattcattga agcacaagaa 60
cttcattgcct tgactcatgt aaatgcaata ggattaaaaa ataaatttga tatcacattg 120
aaacagacaaa aaaattattgt acaacattgc acccagtgct agattctaca cctggccact 180
caggaagcaaa gagttaatcc cagaggtcta tgtcctaagt tgttatggca aatgggatgc 240
atgcacgtac ctctcatttg aaaattgtca ttgtccatg tgacagttga tacttattca 300
catttcatat gggcaacctg ccagacagga gaaagtactt cccatgttaa aagacattta 360
ttatcttggt ttctgtgcat gggagttcca gaaaaagtta aaacagacaaa tgggccagggt 420
tactgtagta aagcatttca aaaattctta aatcagtgga aaattacaca tacaatagga 480
attctctata attcccaagg acaggccata attgaaggaa ctaatagaac actcaaagct 540
caattgggtta aacaaaaaaa aaaaa 565

<210> 592
<211> 188
<212> PRT
<213> Homo sapien

<400> 592
Thr Lys Ala Asn Glu Gln Ala Asp Leu Leu Val Ser Ser Ala Phe Ile
1 5 10 15
Glu Ala Gln Glu Leu His Ala Leu Thr His Val Asn Ala Ile Gly Leu
20 25 30
Lys Asn Lys Phe Asp Ile Thr Trp Lys Gln Thr Lys Asn Ile Val Gln
35 40 45
His Cys Thr Gln Cys Gln Ile Leu His Leu Ala Thr Gln Glu Ala Arg
50 55 60
Val Asn Pro Arg Gly Leu Cys Pro Asn Val Leu Trp Gln Met Asp Val
65 70 75 80
Met His Val Pro Ser Phe Gly Lys Leu Ser Phe Val His Val Thr Val
85 90 95
Asp Thr Tyr Ser His Phe Ile Trp Ala Thr Cys Gln Thr Gly Glu Ser
100 105 110
Thr Ser His Val Lys Arg His Leu Leu Ser Cys Phe Pro Val Met Gly
115 120 125
Val Pro Glu Lys Val Lys Thr Asp Asn Gly Pro Gly Tyr Cys Ser Lys
130 135 140
Ala Phe Gln Lys Phe Leu Asn Gln Trp Lys Ile Thr His Thr Ile Gly
145 150 155 160
Ile Leu Tyr Asn Ser Gln Gly Gln Ala Ile Ile Glu Gly Thr Asn Arg
165 170 175
Thr Leu Lys Ala Gln Leu Val Lys Gln Lys Lys Lys
180 185

<210> 593
<211> 271

```

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(271)
<223> n = A,T,C or G

<400> 593
actttatgtt cnagtgcana aancncctg gattgccacc ntactctcag ggctgtgant      60
tgtgcnccca nagcaacctg ggcacgcggg gacagggggg ccnacaattg gggagagcgt      120
gtcccttagct ggggtctata catgncnngg naaggcngc tgagtnccat nagcaaaagga      180
nctagnatnt gcggggggtgc ggcctgggcc taccctttna agcatccntn gatccactcc      240
angaancnng gggtagncag gtttnccaac a                                     271

<210> 594
<211> 376
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(376)
<223> n = A,T,C or G

<400> 594
cctttggggg nggggggaac ctttaccatt gtnccocctt atttcatttg gttnggggtc      60
ggccctcenn gggccaacaa agttatcgtn nttgaagaga anattttttt ggnttngncc      120
cgattaaagc ncaaatgtgt agcaaaaangc cgtgccactt gtggcgtagc tncgtcgggt      180
cgattcgacg acaaggcgtn gcgcgntanc gttagtctcn aatngaccen gtggcatgag      240
cccacganga nttcgtgtcg tcacatggnc tctagacata acgcncnccn ttttttnacg      300
agggggntgc cgcccttagg gaggnagggg tggggacact agccaancca nantctnacc      360
ccattgaaga aaaggn                                     376

<210> 595
<211> 242
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(242)
<223> n = A,T,C or G

<400> 595
agnctgctgn tcgtnccctn tatgtggctt catnntgagg acaanagtnq cactgaggct      60
tgnqnatgcc aggcaaggnc aagctggctc aaaaagcatc caccacctc tгнаanggg      120
atgccangag cangtcacc agtcccaact angagncccn ggcatgntac atctctctcc      180
accctnaaaa ntttngncta caangnccat ttttctttt ctcttaaggg ncncntggct      240
tc                                                         242

<210> 596
<211> 535
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature

```

<222> (1)...(535)

<223> n = A,T,C or G

<400> 596

accagttgga	tactgctaaa	nagatattta	tcgagcctca	tatgttaagt	cgtatatttt	60
gaaagctttt	taaatTTTTT	ctttaagaag	atttttagatg	cttatcactg	agtaccagag	120
ggatgtaggc	tgaatgccctt	atcaacaaag	tcaggaggctg	tggcacacaa	ggattgacta	180
ctgcagacac	ggccacaatg	ctacctctag	agggcctgaa	tccccctgcc	ctctctgggtg	240
gggagaaggg	ctggcagagc	cattagcatg	ggctccggcc	aatcctggcc	actttgacac	300
tcctgtgtct	gacccagggt	cctggaggaa	gggatgaggt	gggcagtaga	gatgctcagg	360
cgatgggcc	ctttccatcc	acactggaa	tatttcagta	ttttaccacc	aattcagcca	420
ttccctgtgtg	cgctggctga	acatcagccc	tgctccaggt	ctcagtttcc	ccctttgtaa	480
gggaaagctc	tggtattcag	gagtgatgaa	gaggtcatca	tggtcttgag	aattc	535

<210> 597

<211> 257

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(257)

<223> n = A,T,C or G

<400> 597

tttcnatacc	caaaantacc	ccatattang	accanacatt	tgctcnggaa	aaattaccat	60
tnntaantac	ttgggccacc	tgaganna	tggtgtgaat	ncatgataag	atggancagn	120
atnctctcta	agatnngatn	agaccocgtt	tttcacggaa	catatccaag	nacccaatag	180
gnaacaagcc	acggngggag	tcacaaacat	atatctctta	ctctcataat	ccgtnnnaca	240
naactnttgn	acttgac					257

<210> 598

<211> 222

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(222)

<223> n = A,T,C or G

<400> 598

nntggntacc	gtcnaaaactt	nncttggtag	ccgagctcgg	atccactagt	ccagtggtgtg	60
ggaattccat	tgtgttgggc	tataagctgt	aatagtggag	ncgtgctnng	ttcattgcan	120
nagnccctcc	gcanncaacn	ttgnnacaac	ctgtgagnag	gcataaaatt	attcacataa	180
tcataactgc	atgaantcga	ctcaaacgca	tcacntaca	cc		222

<210> 599

<211> 238

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(238)

<223> n = A,T,C or G

<400> 599

gcattgacatc	ancgatgtnt	ttggnnacct	ganattngct	aaaactngng	natgccgggn	60
atgnaggttt	gggtantgatc	tatgcactca	catctcatgg	ggacgtttca	tgtggagtgn	120
tcgacaangt	tgctgnannc	gagaagtgat	gatctcagtt	gaaagggtca	tgtgaatata	180
cnttacactt	gaaaaagaag	cacattggga	atatcacgaa	acgnccacca	acatctctg	238

<210> 600
 <211> 232
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc feature
 <222> (1)...(232)
 <223> n = A,T,C or G

<400> 600	
cgaactattt agactaccta ggaaattat tttagtatca gaagaatata aggggtgtag	60
tactcatcag agctaaatga gagcgcttta aaaatgttag ttgtctctcc gccatttcta	120
cagaaagctg caatttcaggt ttttcaacct aataggtgat atttaaaaa aaaaaaaagc	180
aatcgcaaat agccccactg cttttacaaa tcatTTTTTt cccaacacaa tg	232

<210> 601
 <211> 547
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc feature
 <222> (1)...(547)
 <223> n = A,T,C or G

<400> 601	
catttgtgtg gggaaaaaat gatttgtata agcagtgagg ctatttgcca ttgctttttt	60
ttttttctaa atatcaccta tttaggttgaa aacctgaaat tgcagctttc tgtagaatatg	120
gcggaagaca aactaacatt tttaaagcgc tctcatttag ctctgatgag tactacaccc	180
ctnatattct tctgatacta aaataatttt cctagtgtag tctaaacttt tttaaataaga	240
catgtaatcc gcggagttag taactcaaaa cgagtgcatc tnggaagtat cgcagccgtt	300
ncgtgatnaa attccagctg tgctngcttg cttagccggg ggpgcgttnaa aaaaacatct	360
cgagcccmng ggnaaaaacc ttgcctattg tcttacgtgt ttacgttatt ttatttcctt	420
nnagcaaggc nggganttgg ggactcgaaa tggtagagtt gggtcgggga tgcgctctgt	480
tacataaaag ncgtccagaa gagggagcgt tacaggcngg ganctccaaa ggtcagtcct	540
tgccatt	547

<210> 602
 <211> 826
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc feature
 <222> (1)...(826)
 <223> n = A,T,C or G

<400> 602	
cgggggggnnt tacgtctctc tggacgcttt tattgtacca gggcgatccc agcccaactg	60
taccatttga gtccctactc ctgccttgct ctagggaat aaaaacgt aaacacgtaa	120
gaacaatgcy aaagcgtttt ctcccttagy ctgcagattg tcttcttcac cgccctgtct	180
tagctagcta gctagctggg aatttaatcc agaaacggct tgcgatacct cctagatgca	240

ctcgttttga	gttacaaact	ccgcggatta	catgtctttt	taaaaaagtt	tagactacac	300
tagggaaaat	tatttttagt	tcagaagaat	atcagggggg	gtagtactca	tcagagctna	360
atgagagcgc	tttaaaaatg	ttagtttgct	ttccgccatt	tctacagaaa	gctgcaattt	420
caggttttca	ncctaatagg	tgatatntaa	gaaaaaaa	acaatcgcan	atagcccaact	480
gottttacaa	atatttttct	tcttctaggt	atagcctgtc	aggtggccta	atgtattttt	540
gacatctcta	ggaattttta	tagaccagaa	atgggtgcc	gagatatgcc	tgaactaatc	600
ttaagtgggg	atttagtgat	ttctcaanca	agtattataa	gcaaaactag	gcacgaatga	660
aatcaagatc	tttaggtgat	aaatcatgaa	nanttttana	attattttan	gaactctgtg	720
cttctcttct	taaaatngaa	aaaaaaattg	tttaaaccca	naaggtctga	atacccaagc	780
ncctgaaan	anagaacaan	gccggagcac	ccctcccaa	atcccc		826

<210> 603
 <211> 817
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(817)
 <223> n = A, T, C or G

nnangacttt	tgtggtntta	tacaattntt	ttttctattt	ctatgaagag	aaagccacag	60
agtcctaaaa	taattctaaa	actcatcatg	actttctgtc	ctaaaagatc	ttgatttcaa	120
tcgtgcctag	ttttgcttta	atcaattgct	tgagaaatac	ataaatcccc	acttaagatt	180
agtgacggca	tatctctggc	accattttct	ggttctatta	aaattcctag	agatgtcaaa	240
aattacattta	ggccacctga	caggctatac	ctagaagaga	aaaaatgatt	tgtataaagca	300
gtggggctat	ttgcgattgc	tttttttttt	tcttaaatat	cacctattag	gttgaaaacc	360
tgaatttgca	gctttctgtg	gaaatggcgg	aagacaaact	aacattttta	aagcgctctc	420
atttagctct	gatgagtact	acacccttga	tattctctgt	atactaaaat	aattttccta	480
gtgtagctta	aactttttta	aaaagacatg	taatcccgcg	agtttgtaac	tcaaaacgag	540
tgcctcatagg	aggtatcgca	agcgttttct	ggattaaatt	cccagctagc	ttgcttgctt	600
agcagggggc	ggnaaanaag	acatctgcag	cctaggggaag	aaaaactttc	gcattgttct	660
tacgtgttta	cggtatttta	tttctctana	caaggcngaa	ttgggactgc	aatgtgttcag	720
ttgggggtgg	ggatccctgt	gtncataaaa	ngtcanaaag	anggtacagg	cggaacncca	780
agggtcgtcc	tgcatttana	ctcggaattt	tgggtgcc			817

<210> 604
 <211> 694
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(694)
 <223> n = A, T, C or G

cttttcaaat	cattttttnct	cttctaggtta	tancctgtca	ggtggcctaa	tgtaattttt	60
gacatctcta	ngaatttttaa	tagaaccaga	aatgggtgcc	agagatatgc	ctgcactaat	120
cttaagtggg	gatttatgtta	tttctcaagc	agtgatttaa	agcaaaatgc	ggcacgattg	180
aaatcaagat	cttttaggca	anaaagtcac	gatgagtttt	agaattattt	taggactctg	240
tggctttctc	ttcatagaaa	tagaaaaaaa	aattgtataa	aaccacaaaa	ggctctgaat	300
agccaaagca	acactganca	aaaagaacan	agcagggaag	caacacacta	ccngaattca	360
aattatacta	ccaggggtgta	gtaacaaaaa	cagcattcta	ttggcctaaa	atagacacca	420
agaccaatgg	ancagaataa	agaaacccac	aaataaatcc	atatatntac	cgccanctga	480
ttatcaataa	cnaacaccaa	gaacatatnt	taagggacnt	ncattccaat	aantagtgtc	540
ggnaaaaact	gggaatacca	tatgcagaaa	naatgaaact	agaccctcat	ccctcaccat	600

acgcgaannt caacttcgga atgggattac aaaacttaag acattccaac ccaagaaact 660
atnaaancta ctattaagaa aacagatcnc nccc 694

<210> 605
<211> 678
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(678)
<223> n = A,T,C or G

<400> 605
taaaaatcta gactacacta ggaaattatt ttantatcag aagaatatca ggggtgtagt 60
actcatcana gctaaatgag agcgctttaa aaatgttagt ttgtcttccg ccatttctac 120
agaaagctgc aatttccagg tttcaacctata atagggtgata ttttaagaaaa aaaaaagca 180
atcgcaaatg gccccactgc ttttacaagt cattttttct ctctctagga tagcctgtca 240
gggtggcctaa tgtaatTTTT gacatctcta ggaattttta tagaaccaga aatgggtgcc 300
agagatatgc ctgcactaat cttaagtggg gatttatgta ttctccaagc aagtatttaa 360
agcaaaacta ggcaagcttg aaatcaanat cttttaggca agaaagtcac gatgattttt 420
anaattattt taggactctg tggctttctc ttcatagaaa tagaaaaaaa aaattgtata 480
aaaaccacaa aaggctcctga atagcccaaa gcaacactga acaaaaangaa caaagcagga 540
agcaacacac taccggaatt caattatact accaaggtgt antaaccaaa acagcattct 600
attgggcata aaatagacca aagaccagtg ggaaacagaa taaagaancc caaaaataat 660
cctatatatta cngccccc 678

<210> 606
<211> 263
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(263)
<223> n = A,T,C or G

<400> 606
gtgggggtcng cancacgcaa ctccagcttcc ttccgggctt tggtagcaga cggatcatcc 60
tctagtccac tgtgntcaaa ttccattgtg tggggggccc tggcctggc canagatctg 120
agtganacaa cntgtcccca ctgaggtgcc ccacagcngn ttgtnttcag cangggctna 180
caactcgacc ggcagcngn ggctggcaga antgngcgcc tnnctcatc ctaacgngtn 240
ngccgcagga aggangacag gcc 263

<210> 607
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 607
ccatgtgggt cccggtgtgc tt 22

<210> 608
<211> 22
<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 608

gataggggtg ctcaggggtt gg

22

<210> 609

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 609

gctggacagg gggcaaaagc tggggcagtg aacctgtgc

40

<210> 610

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 610

ccttgtccag atagcccagt agctgac

27

<210> 611

<211> 46

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 611

gatagagaaa accgtccagg ccagtattgt gggaggctgg gagtgc

46

<210> 612

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 612

gcacatgggt cactgcccga gcttttgccc cctgtocaga

40

<210> 613

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 613

gccgctcgag ttagaattcg gggttgcca cgaatggtg

38

<210> 614

<211> 53

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 614

cggcgggcat atgcatcacc atcaccatca catcataaac ggcgaggact gca

53

<210> 615

<211> 46

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 615

gcactccag cctccacaa tactggcctg gacggttttct tctatc

46

<210> 616

<211> 1350

<212> DNA

<213> Homo sapien

<400> 616

atgcatcacc	atcaccatca	catcataaac	ggcgaggact	gcagcccgca	ctcgcagccc	60
tggcaggcgg	cactggtcat	ggaaaaacgaa	ttgtttctgct	cgggcgctcct	gggtgcctccg	120
cagtggggtgc	tgtagcgcgc	acactgtttc	cagaactcct	acaccatcgg	gctgggctcgt	180
cacagttcttg	aggccgacca	agagccaggg	agccagatgg	tggaggccag	cctctccgta	240
cggcaccag	agtacaacag	acccttgctc	gctaaccgacc	tcattgctcat	caagttggac	300
gaatccgtgt	cagagtctga	caccatccgg	agcatcagca	ttgcttcgca	gtgccctacc	360
gcggggaaact	cttgctcgt	ttctggtctg	ggtctgctg	cgaacggcag	aatgcctacc	420
gtgctgcagt	gcgtgaacgt	gtcgtggtg	tctgaggagg	tctgcagtaa	gctctatgac	480
cgctgttacc	acccagcagt	gttctgcgcc	ggcggagggc	aagaccagaa	ggactcctgc	540
aacggtgact	ctggggggcc	cctgatctgc	aacgggtact	tgaggggcct	tgtgtctttc	600
ggaaaaagccc	cgtgtggcca	agttggcgtg	ccagggtctc	acaccaacct	ctgcaaatc	660
actgagtga	tagagaaaac	cgtccaggcc	agtattgttg	gaggctggga	gtgcgagaag	720
cattccaac	cctggcaggt	gcttgtggcc	tctcgtggca	gggcagctctg	cggcggtgtt	780
ctggtgcacc	cccagtggtg	cctcacagct	gcccaactgca	tcaggaaacaa	aagcgtgac	840
ttgctgggtc	ggcacagcct	gtttcatcct	gaagacacag	gccaggtatt	tcaggtcagc	900
cacagcttcc	cacacccgct	ctacgatatg	agcctcctga	agaatcgatt	cctcaggcca	960
ggtgatgact	ccagccacga	cctcatgctg	ctccgctctg	cagagcctgc	cgagctcacg	1020
gatgctgtga	aggtcatgga	cctgcaccac	caggagccag	cactggggac	cacctgctac	1080
gcctcaggtc	ggggcagcat	tgaaccagag	gagttcttga	ccccaaagaa	acttcaagtgt	1140
gtggacctcc	atgttatttc	caatgacgtg	tgtgcgcaag	ttcaccccta	gaaggtgacc	1200
aagtctcatg	tgtgtgctgg	acgtgtgaca	gggggcaaaa	gctggggcag	tgaacctatgt	1260
gcctctcccg	aaagcccttc	cctgtacacc	aaggtggtgc	attaccggaa	gtgatcatag	1320
gacaccatcg	tggccaaccc	cgaattctaa				1350

<210> 617

<211> 449

<212> PRT

<213> Homo sapien

<400> 617

```

Met His His His His His His Ile Ile Asn Gly Glu Asp Cys Ser Pro
  1                               5                               10 15
His Ser Gln Pro Trp Gln Ala Ala Leu Val Met Glu Asn Glu Leu Phe
      20                               25                               30
Cys Ser Gly Val Leu Val His Pro Gln Trp Val Leu Ser Ala Ala His
      35                               40                               45
Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly Leu His Ser Leu Glu
      50                               55                               60
Ala Asp Gln Glu Pro Gly Ser Gln Met Val Glu Ala Ser Leu Ser Val
      65                               70                               75
Arg His Pro Glu Tyr Asn Arg Pro Leu Leu Ala Asn Asp Leu Met Leu
      85                               90                               95
Ile Lys Leu Asp Glu Ser Val Ser Glu Ser Asp Thr Ile Arg Ser Ile
      100                              105                              110
Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly Asn Ser Cys Leu Val Ser
      115                              120                              125
Gly Trp Gly Leu Leu Ala Asn Gly Arg Met Pro Thr Val Leu Gln Cys
      130                              135                              140
Val Asn Val Ser Val Val Ser Glu Glu Val Cys Ser Lys Leu Tyr Asp
      145                              150                              155
Pro Leu Tyr His Pro Ser Met Phe Cys Ala Gly Gly Gly Gln Asp Gln
      165                              170                              175
Lys Asp Ser Cys Asn Gly Asp Ser Gly Gly Pro Leu Ile Cys Asn Gly
      180                              185                              190
Tyr Leu Gln Gly Leu Val Ser Phe Gly Lys Ala Pro Cys Gly Gln Val
      195                              200                              205
Gly Val Pro Gly Val Tyr Thr Asn Leu Cys Lys Phe Thr Glu Trp Ile
      210                              215                              220
Glu Lys Thr Val Gln Ala Ser Ile Val Gly Gly Trp Glu Cys Glu Lys
      225                              230                              235
His Ser Gln Pro Trp Gln Val Leu Val Ala Ser Arg Gly Arg Ala Val
      245                              250                              255
Cys Gly Gly Val Leu Val His Pro Gln Trp Val Leu Thr Ala Ala His
      260                              265                              270
Cys Ile Arg Asn Lys Ser Val Ile Leu Leu Gly Arg His Ser Leu Phe
      275                              280                              285
His Pro Glu Asp Thr Gly Gln Val Phe Gln Val Ser His Ser Phe Pro
      290                              295                              300
His Pro Leu Tyr Asp Met Ser Leu Leu Lys Asn Arg Phe Leu Arg Pro
      305                              310                              315
Gly Asp Asp Ser Ser His Asp Leu Met Leu Leu Arg Leu Ser Glu Pro
      325                              330                              335
Ala Glu Leu Thr Asp Ala Val Lys Val Met Asp Leu Pro Thr Gln Glu
      340                              345                              350
Pro Ala Leu Gly Thr Thr Cys Trp Ala Ser Gly Trp Gly Ser Ile Glu
      355                              360                              365
Pro Glu Glu Phe Leu Thr Pro Lys Lys Leu Gln Cys Val Asp Leu His
      370                              375                              380
Val Ile Ser Asn Asp Val Cys Ala Gln Val His Pro Gln Lys Val Thr
      385                              390                              395
Lys Phe Met Leu Cys Ala Gly Arg Trp Thr Gly Gly Lys Ser Trp Gly
      405                              410                              415
Ser Glu Pro Cys Ala Leu Pro Glu Arg Pro Ser Leu Tyr Thr Lys Val

```

420 425 430
Val His Tyr Arg Lys Trp Ile Lys Asp Thr Ile Val Ala Asn Pro Glu
435 440 445
Phe

<210> 618
<211> 3923
<212> DNA
<213> Homo sapien

<400> 618
acagaagaaa tagcaagctg cgagaagctg gcatcagaaa aacagagggg agatttctgt 60
ggctgcagcc gggggagacc aggaagatct gcatggtggg aaggacctga tgatcacagag 120
gaattacaac acatatactt agtggtttcaa tgaacaccaa gataaataag tgaagagcta 180
gtccgctgtg agtctcctca gtgacacagg gctggatcac catcgacgag actttctgag 240
tactcagctg agcaaaagaa gactacagac atctcaatgg cagggggtgag aaataagaaa 300
ggctgctgac ttaccactct gaggccacac atctgctgaa atggagataa ttaacatcac 360
tagaacaacg aagatgacaa tataatgtct aagtatgac atgtttttgc acatttccag 420
cccttttaaa tatccacaca cacaggaagc acaaaaggaa gcacagagat cccctgggaga 480
aatgcccgcc cgccatctgt ggtcatcgat gagcctcgcc ctgtgcctgg tcccgcttgt 540
gagggaaagg cattagaaaa tgaattgatg tgttccctaa aggatgggca ggaaaaacaga 600
tccgtgttgt gatatttatt tgaacgggat tacagatttg aatgaagtc acaaatgtgag 660
cattaccaat gagaggaaaa cacagcagaa aatcttgatg gcttcacaag acatgaacaa 720
aaacaaatgg aatactgtga tgcacatgagg cagccaagct gggggaggaga taacacagggg 780
gcagagggct aggatctctgg cctgtgctgcc taaactgtgc gtctataacc aaatcatttc 840
atatcttcaa cctccaaaac aaagctgttg taatatctga tctctacggt tccctctggg 900
cccaacattc tccatatact cagccacact catttttaat attagttcc cagatctgta 960
ctgtgcactt tccacatctg agaataacat tactcatttt gtccaagac cctctgtgtt 1020
gctgcctaata atgtagctga ctgtttttcc taaggagtgt tctggccacg gggatctgtg 1080
aacaggctgg gaagcatctc aagatctttc cagggttata cttactagca cacagcatga 1140
tcattacgga gtgaattatc taatcaacat catcctcagt gtctttgcc atactgaaat 1200
tcatttccca cttttgtgcc cattctcaag acctcaaaat gtcattccat taatatcaca 1260
ggattaaact ttttttttaa cctggaagaa ttcaatgtta catgcagcta tgggaaattta 1320
attacattat ttgttttcca gtgcaaaagt gactaaagtc ttatccctc cctttgtttt 1380
gatttttttt ccagtataaa gttaaaatgc ttgacctgtg actgaggctg tatcacagac 1440
agcctctccc catccttcca gcccttatctg tcatcaccat caacccctcc catcacacct 1500
aaacaaatcc taactgttaa ttcttgaac atgtcaggac atacattatt cctctgctct 1560
gagaagctct tccctgtctc ttaaatctag aatgatgaa agttttgaat aagttgacta 1620
tcttacttca tgcaaaagaa ggacacatat gagattctac atcacatgag acagcaaat 1680
ctaaaagtgt aatttgatta taagagttta gataaatata tgaatgcaa gagccacaga 1740
gggaatgttt atggggcagc ttgtgaagcc tgggatgtga agcaaaaggca gggaacctca 1800
tagtatctta tataatatac ttcatttctc tatctctatc acaatatcca acaagctttt 1860
cacagaatcc atgcagtgca aatcccccac ggttaacctt atccatttca tgtgtgagtc 1920
gctttagaat ttgtgcaaat catactgttc acttatctca actttgagat gtgtttgtcc 1980
ttgtatgtaa ttgaaagata tagggcactc ttgtgagcca ctttagggtt cccctctcgc 2040
aataaagaat ttacaagagc ctactcagga ccagttgtta agagctctgt gtgtgtgtgt 2100
gtgtgtgtgt gagtgtacat gccaaagtgt gccctctctc cttagcccat tatttcagac 2160
ttaaaacaag catgttttca aatggcacta tgagctgcca atgatgtatc accaccatat 2220
ctcattattc tccagttaaa ttgataataa tgtcatctgt taacataaaa aaagtttgac 2280
ttcacaaaag cagctggaaa tggacaacca caatgtgcat aaactcaact cctaccatca 2340
gctacacact ccttgacata tatgtttaga agcaacctgc atttgtgggt tctctttagc 2400
aaaataactg cattagctct cagctggggc ttgtcatcag gcggtttgag aaatattcca 2460
ttctcagcag aagccagaat ttgaattccc tcatctttta ggaatcattt accaggtttg 2520
gagagattc agacagctca ggtgctttca ctaatgtctc tgaactctct tccctctttg 2580
tgttcagtga tagtccaata aataatgtta tctttgaact gatgctcata ggagagata 2640
taagaactct gagtgtatct aacattaggg attcaagaa atattagatt tagactcaca 2700